

CONTENTS

List of Illustrations	v
List of Appendices	vii
Preface	ix
Chapter 1. The Roots of the American Scientific Affiliation.	1
The Founding Fathers of the ASA	4
The Organizing Meeting	7
What Led Up to the First Meeting?	8
The First Executive Council.	10
The Effect of World War II	11
Other Science/Faith Organizations.	12
Victoria Institute	12
Religion and Science Association	13
Kelvin Institute.	13
Evolution Protest Movement	13
Nature and Scripture Study Club	14
Adventist Activities	14
References, Chapter 1	17
Chapter 2. Organizing the American Scientific Affiliation	19
Choosing a Name	19
The American Identification.	19
The Lack of Christian Identification.	20
Initials	21

The Constitution	21
The First Revision	22
The Second Revision	23
Incorporation	25
Executive Council Rotation	26
Officers	27
Executive Secretary-Executive Director	27
Promotion and Publicity	30
Membership	31
Growth of Membership	32
Member Classification	32
Local Sections	34
Growth of Local Sections	35
Local Section Topics	35
References, Chapter 2	38
Chapter 3. American Scientific Affiliation Conventions	39
The First ASA Convention (1946)	40
The Second ASA Convention (1947)	41
The Third ASA Convention (1948)	43
The Fourth ASA Convention (1949)	45
Other Conventions	48
Convention Topics 1946–1984	60
The Evangelical Theological Society	61
References, Chapter 3	62

Chapter 4. Publications of the American Scientific Affiliation	63
Books and Monographs	63
<i>Modern Science and Christian Faith</i>	63
<i>Evolution and Christian Thought Today</i>	66
Monographs	67
Periodicals	68
<i>Journal of the American Scientific Affiliation</i>	68
Editorship	69
Growth in Influence of the <i>Journal ASA</i>	70
Subject Categories in <i>Journal ASA</i>	70
Book Reviews in <i>Journal ASA</i>	71
Editorial and Publication Boards	72
<i>American Scientific Affiliation News</i>	73
Miscellaneous Publications	73
Ten Prominent Scientists Look at Life	73
Early Promotional Booklet	74
References, Chapter 4	74
 Chapter 5. Reviewing Function of the ASA	 77
Reviews of Internal Material	77
Solicited Reviews from Outside the ASA	77
Unsolicited Reviews of Outside Material	78
Film Reviews	78
Meaning of “Approval”.	79
References, Chapter 5	80

Chapter 6. What Is the “Position” of the ASA?	81
References, Chapter 6	84
Chapter 7. The ASA and the CRS	87
References, Chapter 7	90
Chapter 8. The Canadian Scientific and Christian Affiliation	91
References, Chapter 8	93
Chapter 9. A “Recounting of the Acts of God” within the ASA	95
The Fellows	95
The Executive Council and Officers	96
Executive Secretaries/Directors	96
The Conventions	97
The Local Sections	98
The Commissions	98
Get-Togethers at Scientific Meetings	99
The <i>Journal of the ASA</i>	99
The <i>ASA News</i>	100
Publications	100
Relationship	100
The California Textbook Controversy	101
References, Chapter 9.	102

LIST OF ILLUSTRATIONS

Figure	Subject	Page
	Photo, Irwin Moon, Will Houghton	3
	Photo of Founder: John P. Van Haitzma	4
	Photo of Founder: Peter W. Stoner	5
	Photo of Founder: Russell D. Sturgis	5
	Photo of Founder: Irving A. Cowperthwaite	6
	Photo of Founder: F. Alton Everest	6
1	Graph of Membership Growth, 1941–1985	33
2	Presentations at Local Sections	36
3	Subject Categories of Local Section Meetings	37
4	1946 Convention Picture—Wheaton College	40
5	1947 Convention Picture—Taylor University	42
6	1948 Convention Picture—Calvin College	44
7	1948 Convention Committee	45
8	1949 Convention Picture—Bible Inst. Los Angeles	46
9	1949 Field Trip—LaBrea Tar Pits	47
10	1949 Field Trip—Palomar Observatory	47
11	1949 Field Trip—Palomar Observatory	48
12	1950 Convention Picture—Goshen College	49
13	1950 Executive Council	50
14	1958 Convention Committee	50
15	1958 Convention Session	51
16	1958 Convention—Bullock and Gathercoal	51
17	1958 Convention—Kulp delivering paper	52
18	1958 Convention—Mixer delivering paper	52
19	1950 Convention—Fetzer, Erdman and Schrock	53
20	1951 Convention Picture—Shelton College	53
21	1951 Convention Personalities	54
22	1952 Convention Picture—Black Hills	55
23	1952 Convention Personalities	55
24	1952 Convention Geology Field Trip	56
25	1954 Convention Picture—Eastern Mennonite College	56
26	1956 Convention Picture—Wheaton College	57
27	1958 Convention Picture—Iowa State College	57
28	1959 Convention Picture—Trinity Sem. and Bible Coll.	58
29	1960 Convention Picture—Seattle Pacific College	58
30	1962 Convention Picture—Bethel College	59
31	1966 Convention Picture—North Park College	59
32	1966 ASA/ETS Convention Committee	60
33	Subject Categories of ASA Annual Conventions	60
34	Subject Categories of ASA Journal Papers	71
35	Book Reviews in <i>Journal ASA</i>	72
36	Voting Membership of ASA and CRS	88

LIST OF APPENDICES

Appendix	Subject	Page
1.	Minutes of First Meeting—1941	103
2.	The First Constitution	107
3.	Constitution Adopted August 1950	108
4.	Constitution (4th Draft) Adopted 11 May 1959.	111
5.	Constitution (Revised) Adopted 6 January 1970	115
6.	Articles of Incorporation Filed 23 August 1943	120
7.	Articles of Incorporation (Illinois, date?)	128
8.	Executive Council Rotation (1941–1985)	131
9.	Officers of the ASA (1941–1985)	133
10.	Publicity: Keith L. Brooks, “Putting God Right with the Scientists” (1944)	135
11.	Publicity: Keith L. Brooks, “Astronomers Up in the Air” (1945)	136
12.	Publicity: Keith L. Brooks, “Scientists Decide Universe Was Created” (1949)	137
13.	Publicity: Typical Clippings, ASA and <i>Modern Science and Christian Faith</i> (1948)	138
14.	Modern Science and Christian Faith Review, HIS MAGAZINE, (1949).	139
15.	Publicity: 1950 Convention, Calvin Forum (1950)	141
16.	Richard Bube, “God’s Revelations in True Science and in the Scripture,” Collegiate Challenge (1961)	142
17.	Donald S. Robertson (ASA member), “Out of the Lab,” The King’s Business (1957).	144
18.	“Faith and the Scientist,” <i>Time Magazine</i> , 29 June 1962 and response by ASA member George K. Schweitzer	145
19.	“The Christian Intellectual,” James Kraakevik (ASA member) Wheaton Alumni, October 1968	147
20.	“Christians in Science,” coverage of 1979 Stanford Convention, Evangelical Newsletter	149
21.	ASA Membership Growth, 1941–1985	150
22.	Number of Local Section Meetings, 1960–1984	151
23.	Local Section Subject Categories, 1960–1984	152
24.	List of Conventions of the ASA, 1946–1985	153
25.	Program of the First ASA Convention, Wheaton College, 1946	155
26.	Program of the Second ASA Convention, Taylor University, 1947	163
27.	Program of the Third ASA Convention, Calvin College, 1948	171

28.	Program of the Fourth ASA Convention, Biola, Los Angeles, 1949	175
29.	Subject Categories of ASA Conventions, 1946–1984 . . .	181
30.	Brochure, “Student’s Handbook Project of the ASA” . . .	182
31.	Contents page of <i>Evolution and Christian Thought Today</i> (1959), Wm. B. Eerdmans, Grand Rapids, MI . . .	184
32.	Subject Categories of Journal ASA Papers (1949–1983)	185
33.	“The Evolution of a Policy on Textbooks— Trimming Darwin’s Beard” by Robert B. Fischer, <i>Los Angeles Times</i> , 15 April 1973, Part VII.	186

PREFACE

One sign that an organization has matured or is in the process of maturing is a growing consciousness within that organization that a history should be written, that archives should be established. The American Scientific Affiliation (ASA) Executive Council has appointed a succession of Historical Committees since the 1950s. The charge to these committees is not clear: it may have been an expression of a genuine conviction that the early history of the ASA should be presented to the membership occasionally to remind them of their roots, or it may have been simply an assignment of dignity for the “Fossil Club” sitting in the front row at conventions.

The history of a Christian organization, as expressed by Ted Engstrom of World Vision, is “a recounting of the acts of God.” The ASA is in a process of both sacred and secular history and the more clearly we understand this, the better our evaluation of the long-range worth of our immediate tasks.

This is *not* a historian’s history of the ASA. It is simply a compilation of early events, records, and impressions before they are lost forever. The qualifications of the author have nothing to do with an understanding of the changing philosophical interface between science and the Christian faith. My training in engineering and physics provides little basis for evaluating the historical significance of the events in which I have participated. My only qualification is that I was one of the five “founding fathers” of the ASA in 1941, in fact, the youngest of the five. Further, I was the president for the first ten years and the originator of much in the early files exhumed during this project.

This “history,” then, is more an assemblage of facts than a historical analysis of those facts, although a certain amount of analysis from the viewpoint of a participant is included. It is a chronicle of the acts of God as his hand moved his followers in bringing the American Scientific Affiliation into being. As we look back, none can deny the guiding hand of the Lord along the way. As we look to the future can we not also depend on his guiding hand?

F. Alton Everest
1986

The Roots of the American Scientific Affiliation

In June 1941, the following letter from Will H. Houghton, President of Moody Bible Institute, was received by several persons:

Some of us believe the time has come for a meeting of science teachers who are Christians and who feel that some scientific facts are not having proper recognition, while some hypotheses are being presented as laboratory truth. It might be that eventually an organization will come into being, but this is not the immediate plan of the two or three in back of this letter. Our thought is of an annual meeting, which could be a kind of clearing house for ideas. There should be the presentation of papers, and free discussion of these papers.

There are two special things that such an annual conference might do, namely, help ministers and evangelists who are dealing with scientific subjects, and make available certain phases of truth, the understanding of which may so far be the private possession of some men. There might also develop from this a handbook for college students which would forewarn them as to what they might expect in some textbooks and classrooms, and would inform them of further facts to be considered. We feel that these conferences, at least in their early years, should deal largely with the exact sciences, though it might be wise to have a few representatives of those who teach in realms of the inferential.

The first step in the plan is this. Would you be one of a small group of men to spend two or three days in Chicago in the period, September 2 to 5, 1941? The men would all be teachers of science in accredited schools. The purpose of this first gathering would be to canvass the possibilities of a larger conference. It would discuss who should be invited to such a conference, who should be asked to write papers, and what should be their subjects. The date and place of such a conference, if planned, would naturally be considered.

It is not the thought to have public meetings anywhere in connection with this plan. There is to be no publicity, and no attempt to crash the newspapers. It is not to be an adjunct of the Moody Bible Institute. Some of us are initiating this, but we haven't any desire to control it, and certainly it would be limited if it were known by any one educational institution.

We feel this matter is so important that through the contribution of a friend we are able to invite you to the Chicago visit with the assurance that we will meet the expenses—transportation both ways, and entertainment.

Mr. Irwin A. Moon is the originator of this idea, and we are glad to work with him in carrying it out. Mr. Moon is an ordained minister, but is an earnest student of science. He uses equipment in delivering what he calls "Sermons from Science," and for two seasons was at Treasure Island, San Francisco, under a committee of Christian businessmen. Mr. Moon will be giving his demonstrations the evenings of this September week, but will be at liberty during the day to meet with us for the free exchange of ideas. You understand there is no relationship between the day meetings of this committee and the evening services. We are setting the date during this week because Mr. Moon will be in Chicago at that time. He has no desire to dominate this group, or in any way to be its teacher. We want you to be very sure the group will be entirely free to make its own plans.

Now, if any phase of this is not quite clear, please ask questions. If you could not attend this preliminary meeting, would you suggest a substitute who is also a born-again Christian? Also, would you give us the names of teachers who should be invited to the larger conference? It is our thought that at first these teachers should all be from junior college up. Perhaps later high school teachers of science would be accepted.

Trusting that something of vision may be stimulated by this inadequate presentation of something we feel to be important, and with the hope that you will be able to attend, so that we may have the benefit of your wise and interested counsel.¹

The "two or three in back of this letter" are identified as Houghton, the writer of the letter, Irwin A. Moon, and Coleman Crowell, Vice President of Moody Bible Institute. The unnamed donor covering the expenses was

Henry Parsons Crowell, Coleman Crowell's father, wealthy industrialist, patron of Moody Bible Institute (MBI) and numerous other Christian enterprises, and founder of the Crowell Trust.

It would be interesting to know the names of those receiving the above letter. A search has been made of early MBI archives and nothing was found concerning the recipients of this 1941 letter.²



Moody Institute of Science Photo

Irwin A. Moon and Will H. Houghton
(circa 1940)

The Founding Fathers of the ASA

Five men responded to Houghton's invitation:

John P. Van Haitsma
Peter W. Stoner
Russell D. Sturgis
Irving A. Cowperthwaite
F. Alton Everest

A biographical sketch of each follows in inverse order of seniority.

John P. Van Haitsma was born 1 April 1884 in Zutphen, Michigan, to Mr. and Mrs. Peter J. Van Haitsma. When he was eight, the family moved to Grand Rapids where he received his early education. His high school training was at Central High School and the preparatory department of Calvin College. He attended the University of Michigan where he received his AB and AM degrees, specializing in the natural sciences.



John P. Van Haitsma
(1884–1965)
(photo circa 1954)

In 1909, when Calvin College was expanding its curriculum, he was appointed to teach science. This later narrowed down to organic science. When Calvin became a full-fledged college, Van Haitsma became head of its organic science department. During this period he continued his studies at the University of Michigan and the

University of Chicago. For several summers he attended the biological station of the University of Michigan at Douglas Lake, working toward a PhD which he received in 1928. In the course of his research in parasitology, he discovered two new species of fish parasites which he described in his dissertation. In 1942, shortly after the ASA was organized, he privately published a book, *The Supplanter Undeceived*, which involved the heredity of the ringstreaked and spotted sheep and goats in Laban's flocks (Gen. 30). This was a refutation of Jacob's conception of prenatal influences.

Peter W. Stoner received the BS degree in mathematics from Kansas Christian College in 1908 and the MS degree in mathematics and astronomy from the University of California in 1910. He completed residence and all other requirements for the PhD in 1912 which was never awarded because Stoner stood on a matter of principle. His Master's thesis was on an astronomical subject which in expanded form, his committee agreed could also be his Doctor's thesis. However, at the last moment it was



Peter W. Stoner (1888–1980)
(photo circa 1941)

discovered that the University had a rule that a Doctor's thesis must be in the student's major (mathematics), not his minor (astronomy). To cover their mistake the committee agreed as a face-saving gesture that simply constructing a set of models of geometric shapes would qualify as his dissertation. This he refused to do. He accepted a teaching position at Pasadena High School which soon became Pasadena City College in which he served as Chairman of the Department of Mathematics and Astronomy. During this period he was instrumental in establishing the mathematics program for Pasadena city schools from junior high through

college levels. After retirement from Pasadena City College in 1952, he became Chairman of the Science Division, Westmont College and (in 1957) Professor Emeritus of Science.³ He was the author of the book, *From Science to Souls* which, in a later edition, was titled *Science Speaks*.⁴ About 350,000 copies of this book were issued in the English language.

Russell D. Sturgis served as instructor in chemistry at the University of Pennsylvania 1920–1924 and taught chemistry at Franklin and Marshall College for one year. In 1925 he joined the faculty of Ursinus College in Collegetown, PA, as assistant professor, becoming the David Laucks Ham Professor of Chemistry in 1927 and head of the department in 1928. He stepped down from the headship in 1964 but remained a professor of chemistry until his death on 20 November 1969. He was a member of the American Chemical Society and Sigma Xi. In 1961 he received the Lindback Foundation Award for distinguished teaching and in 1964 was awarded an honorary ScD from the University of Delaware. He was a deacon of the First Baptist Church of Norristown, PA, for forty years and secretary of the local school board for twenty-five years. He served as advisor to the “Bible Fellowship” group at Ursinus College. He received his BSc degree from Delaware College in 1919. His MSc (1921) and PhD (1924) degrees were granted by the University of Pennsylvania.



Russell D. Sturgis (1897–1969)
(photo circa 1941)

Irving Cowperthwaite received the BS degree from the Massachusetts Institute of Technology (MIT) in chemistry in 1926. About that time Prof. D. A. MacInnes left MIT for Rockefeller Institute of Medical



Irving A. Cowperthwaite (1904–1999)
(1947 photo)

Research, and he took Cowperthwaite with him. For the next four years Cowperthwaite was a research chemist at the Rockefeller Institute in New York City while pursuing a full graduate program at Columbia University. He received the PhD degree in chemistry from Columbia University in 1931. He was an instructor in inorganic chemistry and directed graduate student research at Columbia, 1930–1936.

He was a member of a writing group at Teachers College, Columbia University, 1936–1937. In 1937 he left Columbia University to become Chief Engineer and Metallurgist at Thompson Wire Company in Boston. If that move seems unusual, remember that 1930–1937 were years of the great depression when the teaching profession was uncertain. He retired from Thompson Wire Co. in 1969. In 1931 Dr Cowperthwaite married Fae Irene Poore, a graduate student at Teachers College. Although they were both on campus at the same time, they actually met at Calvary Baptist Church of New York City, of which Will H. Houghton was pastor. They have been active members in their Boston church throughout their adult lives. Dr. Cowperthwaite has published an impressive list of scientific papers in his field of chemistry.

Alton Everest received the BS degree in Electrical Engineering from Oregon State College (later Oregon State University) in 1932 and the Electrical Engineer degree from Stanford University in 1936, both with minors in physics. After a short time in pioneering development work in television, he accepted a teaching position at Oregon State University in 1936. At the time of Houghton's letter, he was Assistant Professor of Electrical Engineering. With the threat of US involvement in the war, he took a leave from OSU immediately after the Chicago meeting to participate in underwater sound research in San Diego under a University of California contract with the National Defense Research Committee. In 1945 he joined with Irwin A. Moon in founding Moody Institute of



F. Alton Everest (1909–2005)
(1950 photo)

Science from which he retired in 1970. He is a member of Eta Kappa Nu, National Electrical Engineering honor society, and Sigma Xi, National Research Honorary. He is the author of six books and fifty or so papers in electronics, audio, and acoustics. In 1959 Wheaton College bestowed on him an honorary ScD degree.

The Organizing Meeting

During the week of 2–5 September 1941, the above five invited men met in the conference room off the president’s office at the Moody Bible Institute. Although Houghton, Coleman Crowell, and Irwin Moon came in briefly at the beginning of the meeting, they all flatly stated that they had no interest in dominating the group, but only wanted to help if they could. They held completely to this statement and were scarcely seen during work sessions from that point on except that Coleman Crowell (1897–1965), a graduate of Yale University in Mechanical Engineering and Vice President of MBI, sat in as an observer from time to time. The five were completely on their own and free to do as they pleased.

After a bit of awkward groping, they became better acquainted and warmed to the task. Various needs and ways of meeting the needs were expressed. Cowperthwaite was designated as temporary secretary, and a copy of his minutes of this meeting are to be found in Appendix 1.

It was soon agreed that there was “a useful sphere of service for an organization of consecrated scientists” and a list of potential specific tasks for such a group was drawn up. Before analyzing this list, it is well to analyze the outlook and lifese of the five men involved. Three of the five were solidly situated in secular industrial or university settings. The other two, teaching in Christian colleges, had limited contacts with the secular world through scientific meetings and their graduate degree programs. Because all five were committed Christians, it was tacitly assumed that they shared a primary responsibility to live exemplary Christian lives before the world and to excel in their scientific work as a basis for effective witness. Fellowship and mutual encouragement in this, sometimes lonely, vigil were scarcely mentioned, but the exhilarating experience of working closely together during that week is still vivid after almost a half century. Strengthening each other in a spiritual ministry to fellow scientists was an almost unspoken assumption during the discussions. Instead, attention was generally devoted to two things: the needs of the student in the secular scientific environment, and the need for scientifically literate help in the Christian community.

Item #1 (Appendix 1) of tasks suggested for the new organization directed attention toward helping the Christian student of science in the university through the publication of material. The rest of the ten items (with the exception of #7 which has to do with getting new members for the group) focused entirely on helping lay Christians, pastors, teachers, and others develop proper attitudes toward the scientific enterprise and proper appreciation of the place of interpretation in both science and scripture. All were very conscious of the poor image evangelicals frequently project in scientific circles. One thing was evident as discussions progressed and that is that it mattered not if there were disagreements on interpretations of scriptural passages having possible scientific significance. There was a strong sense of oneness in the basics of the faith and a conviction that the problem areas could be studied to refine individual views. Without damage to this sense of oneness, several stated they could not agree with Peter Stoner's interpretation of the early chapters of Genesis. This was an extremely important point and one upon which the work of the ASA is based today; agree on the basics, exhibit tolerance as the polemics are studied, and refrain from the temptation of adopting a "standard" ASA interpretation.

The fundamental needs to be met by the new organization (as described in the minutes of Appendix 1) may be summarized: (a) to review material written by others, (b) to prepare material written by members, and (c) to disseminate worthy material. Beyond this, many organizational details were considered such as name, constitution, and expansion of the membership. The five parted with individual assignments to be pursued.

What Led Up to the First Meeting?

As this meeting turned out to be the organizing meeting for the American Scientific Affiliation consideration of events leading up to the meeting are of interest. In other words, out of what kind of soil did the ASA grow? For an understanding of this, we must go back to a young high school student in Los Angeles, Irwin Moon. He had a consuming interest in science which to him seemed to conflict with his call to the ministry. Putting aside a scholarship to Yale University and disposing of all the science books and electrical gear he had accumulated, he enrolled at Moody Bible Institute of Chicago and completed his work at the Bible Institute of Los Angeles. As a young pastor of the Montecito Park Union Church in Los Angeles, he was struck by the great interest in science shown by his young people. He developed a series of illustrated talks showing that the facts of science and the Bible agree. (It is interesting to note here that

one of his first presentations entitled “The Telescope, the Microscope, and the Bible” visualized through a set of 3.5" x 4" glass slides, was the basis for “God of Creation,” the first 16mm film released by Moody Institute of Science in 1946 which, forty years later, is still serving in twenty-eight language versions in 132 countries of the world.)

Realizing that he had hit upon an extremely effective way to communicate the gospel to young people, he plunged with characteristic vigor and creativity into devising other visual and scientific presentations. Requests for his illustrated sermons pouring in from near and far resulted in his resignation from the pastorate to devote full time to the new ministry.

A typical week’s series of Sermons From Science demonstrations consisted of presentations on the fly, sound, light, telescope-microscope-Bible, and the new birth. The Friday night message on the new birth was illustrated by standing on the “Million volt” Oudin coil while holding a piece of wood overhead which burst into flame as six-foot sparks jumped from it. Many decisions for Christ were made in these meetings and young people rushed to the platform after each service to talk to him, many with questions regarding science and the Christian faith.

Sermons From Science (SFS) became national in scope. It was exhausting work tearing down the platform demonstrations, loading the trailer with two tons of equipment, traveling miles to the next engagement, and setting up for the Monday night demonstration the next week. Popularity grew to such an extent that the SFS series was booked into the largest auditoriums across the nation, typically sponsored by a group of local churches and individuals. Moon always preferred a neutral, secular setting to reach those outside the influence of the church, although some series were held in churches.

During the latter war years, Moon was booked almost exclusively by the USO (United Service Organization) at the various military bases. Sermons From Science demonstrations were scheduled in the base theater, as were also movies and appearances of big name entertainers. These military bases were primarily those on the West coast of the United States at a time when military personnel by the hundreds of thousands were being shipped to action in the Pacific. Under these conditions, soldiers and sailors were especially serious, thoughtful, and responsive. The high priority the military officials placed on Moon’s ministry to the service personnel is indicated by giving him gasoline rations so that he could fly his airplane between engagements to save time and conserve his strength, leaving the surface travel of the trailer load of equipment to an assistant.

In 1940, while Moon was engaged in a series of demonstrations in Salem, Oregon, Everest drove over from Oregon State University in Corvallis to meet with him. In a restaurant that afternoon in Salem, Moon told of the hundreds of students in his meetings whose spiritual problems and doubts were rooted in science. They were face to face with a conflict between the kind of science related to the Bible in their churches and the kind of science presented in the classroom. The science of the classroom was so convincing; should they give up their faith in the God of the Bible? Were there any scientists who were Christians? Out of such student contacts grew the conviction that some sort of organization of Christians trained in science should be formed.

About this time, Moon held a series of demonstrations in the Church of the Open Door in Los Angeles. In the audience was Will H. Houghton, President of Moody Bible Institute of Chicago (MBI), who was thrilled at the potential of the Sermons From Science ministry. Houghton overcame Moon's great reluctance to become associated with any organization and an alliance with the Extension Department of MBI was formed. The 1939–1940 Treasure Island World Fair in San Francisco brought an urgent plea to Moon through the Christian Business Men's Committee of San Francisco (CBMC). Moon was loaned to CBMC by MBI for the duration of the fair and Sermons From Science became one of the most popular exhibits of the fair, reaching hundreds of thousands with the gospel message.

Of course, Irwin Moon's vision of an organization of Christians in science was soon shared with Houghton. As Houghton was a man of action as well as influence, it was not long before the letter opening this account was on its way to those who became the founding fathers of the ASA.

The First Executive Council

The fact that there were five men in the founding group was the determining factor leading to an executive council of five members. At the same time, it was decided that one person should retire each year in preference to replacing all five every five years. The order of retirement was determined: Van Haitsma was to retire at the end of 1942, Cowperthwaite in 1943, Sturgis in 1944, Stoner in 1945, and Everest in 1946. A mechanism was set up in the first draft of a constitution for selecting one new member of the executive council each year.

The five men left Chicago with high aspirations toward developing the group soon to be known as the American Scientific Affiliation. The

enormity of the undertaking gradually dawned upon them as the pressure of regular jobs, physical infirmity, and the difficulty of wartime conditions soon took their toll.

Van Haitisma suffered a hormone imbalance which severely limited his activities. In spite of this, he managed one of the very first regional meetings in Chicago out of which came several prominent members and future leaders. He had previously conducted a “Nature and Scripture” study club which he had to abandon. Because of his health, he felt it was necessary to withdraw completely from the ASA in 1945.

Sturgis’ time of retirement from the council was 1944. Wartime demands fell especially heavy upon him, but in spite of this he also arranged one of the very first regional meetings and identified numerous prospects who later became influential leaders in the ASA. He also participated in the writing of the chapter on chemistry in the “student’s handbook” (later, *Modern Science and Christian Faith*), carrying it through many revisions with R. Laird Harris, who authored the final version. By the end of 1945, Sturgis’ involvement in ASA activities dwindled to near zero.

This meant that the bulk of the wartime council load was carried by three men: Cowperthwaite, Stoner, and Everest. Everest had been elected President and Cowperthwaite Secretary-Treasurer.

The Effect of World War II

The meeting at Moody Bible Institute took place 2–5 September 1941. About three months later, the Japanese attacked Pearl Harbor on 7 December 1941. The human reaction was, “What a time to start a new organization!” In the providence of God, the war years provided not only problems to the fledgling group, but unusual opportunities as well. Enumerating a few of each kind will illustrate this.

Ursinus College, where Sturgis was head of the chemistry department, became one of the fifty-two educational centers for the so-called V-12 Navy Training Program for deck officers and a five-semester course of study in pre-medicine. His work load suddenly reached astronomical proportions. By 1943 his time for ASA activities was reduced to near zero, and in 1944 he asked to be replaced on the executive council.

Gasoline rationing, which affected all civilians, made even local meetings difficult or impractical. Restrictions on plane and rail travel soon made it evident that national or regional meetings were out of the question.

For this reason the first national convention of the ASA did not take place until 1946, after the close of the war.

Everest's first responsibility upon returning to Oregon State University in Corvallis, Oregon, from the Chicago meeting was to prepare his family to move to California. He had taken a leave from Oregon State to participate in wartime work as a civilian scientist with a University of California research project with the Navy in acoustics of the ocean. This was a National Defense Research Committee activity centered on Point Loma in San Diego. As a research section chief, he was forced to travel across the country for personnel recruitment, planning meetings, and technical conferences. Thus, while other ASA Executive Council members suffered stringent travel restrictions, Everest was required to move about the nation on a priority basis. After official business was cared for, he managed to meet prospects and conduct ASA business during the evenings and on weekends.

In 1942 Everest and a mathematics professor from a New York university conducted an animated discussion on ASA plans and prospects in a room in the Pennsylvania Hotel, New York City, during a blackout. During official lulls, he was able to meet with Cowperthwaite in Boston, Sturgis in Collegeville, PA, Houghton in Chicago, and numerous ASA membership prospects along the way. A one-month project in San Francisco gave opportunity to follow up leads in that area.

Other Science/Faith Organizations

During that September week of 1941 as the American Scientific Affiliation was being organized, there was scarcely a mention of other groups, past or present, who had embarked on a comparable mission. The prevailing feeling was that the envisioned needs were not being met by any group. Actually, the five men assembled appeared to be relatively uninformed on other attempts to organize groups with similar intents. It was known that Dr. Van Haitisma had a "Nature and Scripture" study club but this was viewed primarily as a student activity on the Calvin College campus. The fact that a survey of other organizations did not enter into the discussions of the ASA founding group would indicate that there was either little knowledge of the existence of other organizations operating in the general field of interest or little faith in their ability to achieve the goals.

Victoria Institute

Looking back on the situation, it is now known that a number of organizations were contemporary to, and preceded, the ASA. For example,

the Victoria Institute (or Philosophical Society of Great Britain) was founded in 1865 “by a group of men of science and others who were concerned about the attacks which were being leveled, often in the name of science, against some of the foundations of the Christian faith and the integrity of the Scriptures.”⁵ The organization has had a long and useful life and is actively continuing its work today. Its *Faith and Thought (Journal of the Transactions of the Victoria Institute)* contains valuable papers which were followed by early ASA officers.

Religion and Science Association

The Religion and Science Association was organized in 1935 by Dudley Joseph Whitney, George McCready Price, and Byron Nelson. L. Allen Higley, then Chairman of the Department of Chemistry and Geology at Wheaton College, was one of the early directors. Due to internal dissension, its activities were abandoned about 1937. The membership of this group held, according to Ben F. Allen, “... a hodgepodge of scientific interpretations of Genesis ... Naturally it went down in a confused mass. Its founders had failed to see the necessity of unity of scientific convictions as well as theological creeds.”⁶ To achieve this desired unity, Allen goes on to list his ideas on membership requirements that would lead to unity; “(1) that members shall believe in the literal 24-hour week of Creation, (2) that members shall agree that the Creator was not indebted to pre-existing matter for the earth, and (3) that the Deluge should be studied as the probable geological cause of the main geological changes since Creation. These are not the exact words, but the meaning is the same.”⁶

Kelvin Institute

The Kelvin Institute had its origin in Toronto, Canada, about 1935. Arthur C. Custance, formerly a member of the ASA and John F. Howitt, long a faithful ASA member, were among the founders of the Kelvin Institute. Custance stated that the express object of the organization was to “provoke thinking Christians to share their thoughts on a reproducible level.”⁷ Some forty papers were published and at its peak, it had some fifty members in England, Scotland, Australia, USA, and Canada. Its activities ceased during the early 1940s because of the “busy-ness of war.”

Evolution Protest Movement

The Evolution Protest Movement did not find ready acceptance in the USA, although it was active in England and for more than two decades. Sensing this, Arthur Pierson Kelley “... thought that an indigenous society might be better received; hence (I) started the Creationist Society which proved entirely an abortive effort.”⁸ For a limited time, Kelley issued a series of

papers under the name “The Landenberg Review” which carried on the anti-evolutionary causes.

Nature and Scripture Study Club

The Nature and Scripture Study Club of Grand Rapids, previously mentioned, was founded in 1935 by John P. Van Haitsma of Calvin College, one of the founders of the ASA. This group disbanded prior to 1942, at least partially because of Van Haitsma’s failing health. Arthur P. Kelley complained that even though Van Haitsma was well aware of his Creationist Society, he stood aloof from participation in it.⁸

Adventist Activities

Numerous groups and societies were established by persons associated with the Seventh-day Adventist church. These groups were not officially related to the church, nor were all those active in them members of that church. To bring some measure of order to our understanding of the rise and fall of many of these groups, Molleurus Couperus, MD, was asked to share his recollections. Couperus was an active participant in most of the groups in question and, at the same time, showed great interest in the American Scientific Affiliation through his long-held membership and attendance at Southern California meetings. The quotations following are from his 1985 letter.⁹

The Natural Science Foundation was established in 1946, and incorporated under the laws of California on October 11, 1946, as a non-profit organization to collect, preserve and disseminate information concerning natural science.

The organization which established this Foundation was *The Society for the Study of Natural Science and the Bible* (1946–1948), two volumes. This organization succeeded, actually, the Society for the Study of Deluge Geology and Related Sciences, which published the *Bulletin of Deluge Geology and Related Sciences*. The editorial board of that journal consisted of Professor George McCready Price and Dr. Cyril B. Courville, while Ben F. Allen was the Managing Editor. Dell D. Haughey, MD, joined the editorial board in 1943.

The first issue of this *Bulletin* was published in June 1941, but the sponsoring Society was formed in 1938 under the stimulation and encouragement of Price. It was non-denominational, but most of its members belonged to the Seventh-day Adventist Church. The founders held that the geological formations of the crust of the earth were the result

of a worldwide catastrophe, the Noachian Deluge, and that the earth was very young.

As time went on others joined the Society who believed in a divine creation of our earth and its life, but accepted scientific evidence for a long history for the earth. George McCready Price changed his views regarding the earth's age as indicated by his statement in the first issue of *The Forum* of 1946–47:

There is plenty of Scripture to prove the pre-edenic existence of not only the sidereal universe of suns and galaxies but of great numbers of other inhabited worlds for long ages before our earth's Creation Week. And there is very cogent scientific evidence that our sun and all the other planets must all have been created at the same time as the earth ... But many scientific facts seem to indicate that the body of the earth is very much older than the brief six or seven thousand years since the beginning of plant and animal life.

At a lecture period at that time, Price stated that he believed that the earth was probably billions of years old.

Dr. Walter Lammerts was an active member of the Society for the Study of Deluge Geology, and also its successor, the Society of the Study of Natural Science. At about the same time, the meetings of the ASA started in the Los Angeles area, and since Lammerts and I lived in the same area, we would go to the meetings together. As you know Professor Price died in 1963, and Doctor Courville in 1968, and with their departure and the success of the ASA meetings and its Journal, the activities of the Natural Science Foundation ceased. I believe that 1963 was also the year that Lammerts started the publication of the *Creation Research Society Quarterly*.

The Society for the Study of Deluge Geology and Related Science was never sponsored by the Seventh-day Adventist Church, but most of its members did belong to that church. It was no doubt the reputation of George McCready Price as a champion of a young earth and of deluge geology that attracted many non-Adventists to the organization and the *Bulletin*.

You are correct that after the ASA was organized and it became evident what its basic philosophy was regarding

the relationship of science and scripture that I personally favored the joining of the Natural Science Foundation with the ASA. However, at that time the Seventh-day Adventist Church sponsored the establishment of the Geo-Science Research Institute in 1957 at Andrews University, and it was expected that it would be a truly scientific institution, worthy of our interest and support. Dr. Frank L. Marsh (biologist) was its first director, followed by Dr. Richard Ritland (paleontologist) in 1964. This Institute, as you know, is now located in Loma Linda University, and in my opinion now has a basic philosophy very similar to that of the Creation Research Society.

In 1967 the Association of Adventist Forums was formed by a group of graduate students which were attending various universities in North America. They started publishing the quarterly journal, *Spectrum*, in 1969, which is now in its sixteenth year of publication. I was editor and chairman of the editorial board during the first seven years of publication, and Roy Branson is the current editor. It was originally published at Loma Linda, California, and now originates in Washington, DC. It deals with scientific historical and theological issues and resembles in content the *Journal of the American Scientific Affiliation*.”

Once the ASA was established, there was a concerted effort to keep the Executive Council members informed on what was happening in other groups by circulating their published papers. In his circular letter to the other four founding members dated 20 February 1942, Everest started three issues of the *Bulletin of the Deluge Society* on the round robin path. In the same letter, Ben F. Allen’s invitation to the ASA to publish in their *Bulletin* was viewed with skepticism. There were several other proposals from the deluge group to cooperate in publication projects and other ways which were all rejected.

In studying materials from these other groups, a comprehension of the fundamental difference in approach to that of the ASA began to crystallize. Instead of coming together on the dual basis of a shared faith plus fixed interpretations of science and scripture, the American Scientific Affiliation membership shared a basic Christian faith plus a desire to seek the truth between the many conflicting scientific and scriptural interpretations. A member of one of these other groups once wrote to Everest, “Have you any data *against* the theory of radioactive time?” This is a good question as long as proper consideration is also given to the data *for* the theory. Otherwise it reflects a negative, unscientific mindset.

The approach of the ASA, as it was clearly enunciated in the early days and more clearly articulated as the years went by, was to search for truth, no matter whether it agreed with popular scientific or exegetical opinion. This tends to damage the image of the ASA in the eyes of those who equate their particular interpretation of scripture with THE TRUTH. The ASA, then, was structured upon the premise of members unified around a basic Christian faith, but with diversity as to interpretations of science and scriptures. This approach would seem to be vindicated as the ASA approaches the half-century mark.¹⁰⁻¹⁴

Chapter 1

References

- ¹Wilbur M. Smith, *A Watchman on the Wall: The Life Story of Will H. Houghton* (Grand Rapids, MI: Wm. B. Eerdmans Publishing Company, 1951), 142–4.
- ²Personal communication George Sweeting to F. Alton Everest, 6 March 1985.
- ³P. W. Stoner, “God’s Dealings with One Man,” unpublished manuscript now in ASA archives.
- ⁴P. W. Stoner, *From Science to Souls* (Moody Press, 1944; Van Kampen Press, 1952). Released in revised form in 1976 as *Science Speaks*.
- ⁵Promotional pamphlet issued by the Victoria Institute, 12 Queen Anne’s Gate, Westminster, London SW1, date unknown.
- ⁶Letter, Ben F. Allen to F. Alton Everest dated 14 October 1942.
- ⁷Letter; Arthur C. Custance to F. Alton Everest received 9 January 1944.
- ⁸Letter, Arthur P. Kelley to F. Alton Everest dated 25 September 1942.
- ⁹Letter, Molleurus Couperus to F. Alton Everest dated 27 August 1985.
- ¹⁰F. Alton Everest, “The American Scientific Affiliation: The First Decade,” *Journal of the American Scientific Affiliation* 3, no. 3 (Sept. 1951): 33–38.
- ¹¹I. A. Cowperthwaite, “Twenty Years with the American Scientific Affiliation,” *Journal of the American Scientific Affiliation* 13, no. 4 (December 1961): 98–102.
- ¹²F. Alton Everest, “Challenges before the American Scientific Affiliation,” *Journal of the American Scientific Affiliation* 16, no. 1 (Mar. 1964): 10–11.
- ¹³V. Elving Anderson, “The Goals of the ASA: A Personal View,” *Journal of the American Scientific Affiliation* 17, no. 2 (June 1965): 33–36.
- ¹⁴H. Harold Hartzler, “The American Scientific Affiliation, 30 Years,” *Journal of the American Scientific Affiliation* 24, no. 1 (March 1972): 23–27.

Organizing the American Scientific Affiliation

Choosing a Name

The importance of selecting a proper name for the embryonic organization was fully recognized as the five conferred in Chicago. Considerable time was dedicated to this task, but without a decision. The minutes of that first meeting (see Appendix 1) list sixteen names suggested for consideration, among them American Scientific Affiliation. As time ran out “A motion was made by Stoner that the matter of final selection of the name for the organization be left to Everest who will confer with Houghton and Moon.” This motion was seconded by Cowperthwaite and was passed.

Although documentary evidence has not yet been found, memory serves to suggest that further thought on the matter of a name for the new organization settled rather soon on “American Scientific Affiliation.” The last three of the sixteen listed in the minutes are forms of this name which received tacit, though unofficial, approbation of the group of five. Therefore, settling upon “American Scientific Affiliation” was a rather straightforward process and checking it out with Houghton and Moon quite routine. Letterheads displaying this name as well as the names of the five executive council members were in use early in 1942.

The American Identification

Looking back there is some question as to the wisdom of using “American” in the name. The work of the ASA became quite international in scope. The dominance of the United States in world affairs may not be very popular in some cultures. However, the alliance of the ASA with the Canadian Scientific and Christian Affiliation in 1973 emphasizes at least the continental meaning of “American.”

The case for a name with international flavor was eloquently stated by ASA member C. Ray Carlson, a chemical engineer who had worked for

a petroleum firm in Sweden for six years. Here are excerpts of his letter published in the *Journal*:¹

I believe that the ideas, discussions, and philosophy of the ASA could be more readily promulgated in other parts of the world if our organization and its publication were not “burdened” with the word “American” in its name.

In the present era of rebellion and revolution around the world, it is all too popular to be anti-American and prejudiced against everything which emanates from our country ... American churchianity is a particular target for ridicule by Europeans who like to associate our national weaknesses with the hypocrisy of our so-called Christians.

Though I love my country, its heritage, the flag, etc., I do not think I am unpatriotic when I suggest that the cause of our Saviour is best served globally when we avoid those encumbrances which put people off and are in addition to the unavoidable stigma of the Cross ... It is difficult to gain acceptance for the *ASA Journal* by university libraries, professors, and students because of its clear American identification ... yet the concept of the ASA and the ideas and discussions set forth in the *Journal* are so desperately needed in all parts of the world. Of course, there are a few organizations similar to the ASA in other lands, but to my knowledge, they are just as provincial as the ASA.

So, I am really asking for more than a name change—it must be a change in dimension of our outreach.

The Lack of Christian Identification

There have been a few, very few, vocal critics of the name of the ASA in that it does not have “Christian” in it. E. N. Gathercoal appealed for elimination of the “American” and the addition of “Christian” in the name of the American Scientific Affiliation.² He suggested “Association of Christians Affiliated with Science.” J. Lowell Butler’s appeal for the addition of Christian identification to the ASA name was considered by the Executive Council and rejected.³ John R. Howitt expressed himself often on the desirability of a forthright Christian identification in the ASA name throughout his long and faithful involvement in our organization. A Canadian, Dr. Howitt’s views may have found realization in the name of our counterpart and affiliate, the Canadian Scientific and Christian Affiliation. Down through the years, the Executive Council has remained steadfast in their conviction that overt Christian identification in our name would limit the broader influence of the organization. It was felt that the Christian identification must be made clearly but it has

greatest impact when associated with individuals with impeccable scientific qualifications and publications of the highest intellectual standards. The inertia associated with almost a half century of usage is increasingly a deterrent to change.

Initials

While the ASA is distinct from other scientific organizations, that distinction does not apply to the ASA initials. Confusion can reign if only the initials are used. It was realized early that ASA also stands for many other organizations. American Standards Association, Acoustical Society of America, and many others have the same initials and the list of known cases is growing rapidly. The American Schizophrenic Association is a later addition to the list. In 1985 the count appeared to be about thirty-one other domestic organizations having ASA initials. Although amusing, no great difficulty seems to grow out of the situation.

The Constitution

Work toward a constitution for the envisioned association of Christian men of science began many months before the organizing meeting in Chicago. Moon, Houghton, and Everest were in frequent contact (usually by mail) looking forward to the new group. Realizing that the first thing a new organization would require was a constitution, Everest started working in that direction. He obtained copies of the constitutions of the American Association for the Advancement of Science, the Society of the Sigma Xi, and other such groups and searched them for features applicable to the prospective group. On 29 March 1941 a very rough first draft was forwarded to Moon for his reactions. After some alteration, a draft was available for the consideration of the five in Chicago in September 1941.

Although it was discussed extensively in the organizing meeting, especially as to doctrinal statement and qualifications for membership, adjournment came with no formal action taken. It was immediately introduced to the “round robin letter” approach which played such an important role during the early days of the ASA. By the use of much thin paper, carbons, and a heavy stroke, enough copies were made so that almost everything was sent to all of the founding members. In this way, the draft constitution was subjected to the scrutiny of all. It was voted on by postcard and was available in printed form in May 1942 (See Appendix 2).

The First Revision

In a letter Everest wrote to members dated 24 September 1950 he said:

The brief constitution with which we started in 1941 has served the ASA well. However, during the course of administering the work during this time certain deficiencies have become apparent. Two years ago a constitutional committee was appointed to study the problem and to recommend to the ASA membership a revised constitution. The personnel of this committee, composed of present or past members of the executive council is as follows:

Dr. Edwin Y. Monsma, Chairman
Dr. Irving A. Cowperthwaite
Dr. Allan A. MacRae
Dr. Roger J. Voskuyl
Dr. Marion D. Barnes
Prof. Peter W. Stoner

After two years of careful study this committee presented to the Goshen convention a proposed constitution, a copy of which is enclosed. We are urging you to study it carefully and to vote for its acceptance or rejection.

The principle changes are:

- (1) Change in membership structure to include two grades, Associate and Fellow. This will allow many to become active in ASA work who have not the high academic record, yet will maintain high scholarly standards by placing in the hands of the Fellow group the responsibilities of voting and administration. All Fellows must come in through Associate ranks and must demonstrate interest.
- (2) Division into "Constitution" and "Bylaws," the former can be changed only with difficulty and after approval by the Secretary of State of California in which state we are incorporated. The Bylaws contain the details of carrying out the principles of the constitution and may be changed by the council.
- (3) Codifying the many activities which have been carried on with no written direction before.
- (4) Elaboration of doctrinal position of Fellow group. It has been felt by many that a closer doctrinal unity of this group would tend to insure a continuance along conservative lines upon which the group was founded.

The Constitutional Committee, the Executive Council, and the members present at the Goshen convention recommend this proposed constitution to you and urge its adoption for the sake of the better working of the ASA. If accepted by two-thirds of those members voting, it will be effective as soon as it is filed with and approved by the Secretary of State of California. Please register your vote on the enclosed ballot and mail to Dr. Mixer. Votes must be in Dr. Mixer's hands on or before December 31, 1950 to be counted.

This constitution was voted on, accepted, and placed into operation in 1951. An interesting aspect of this is that many members voted to disenfranchise themselves. A copy of this constitution is in Appendix 3.

The Second Revision

Stability in matters of the constitution had not yet arrived. At the August 1951 convention held at Shelton College in New York City, serious objection was raised to the length of the doctrinal statement. A member of the Executive Council, J. Laurence Kulp, urged that the elaborate statement of faith be re-examined. In a letter to John R. Howitt, the new chairman of the constitutional revision committee, dated 31 July 1952, Kulp said the following:

I have a number of changes to suggest which are primarily related to the doctrinal statement and the purposes of the ASA. I think the purposes as now stated are inadequate and the most basic excuse for our existence isn't even stated. On the doctrinal position, I think we can be more effective if we include all real born-again Christians, not only those that will subscribe to a particular narrow creed. In fact, I am basically opposed to elaborate statements of doctrine which one must sign. In any such statement one must be either intellectually dull or dishonest if he thinks that there is only one interpretation of the statement. Further, if there is more than one—as there is for many of them—then why the need at all? If the organization wishes to be this restrictive, the present rules will remain ... These are simply my suggestions on which a number of other members concur ...”

In June of 1952, Russell L. Mixer, then president of the ASA, asked John R. Howitt to continue as head of the constitutional revision committee. Howitt complained of the difficulty of his committee's functioning because of the great geographical spread of the members and writes:

It is imperative that we should present a positive testimony. This is the secret of communism and the other isms. With

all their lies and errors they are unmistakably positive in their positions. It must never be forgotten, however, that we are admonished to “earnestly contend for the faith once for all delivered to the saints” (Jude 3). Our work must therefore embrace both the positive and negative aspects of truth.

Howitt presented suggested constitutional changes to the Executive Council at the Winona Lake convention in September of 1953. He stated that the work was essentially his alone because of the difficulty of working with his widespread committee.

Detailed records are sparse for a few years. In the Executive Council minutes of their 19 February 1955 meeting is recorded the formation of a new constitutional revision committee as follows: Robert P. Dilworth (Chair), Howitt, Oorthuys, Rusk, and Turekian. A “major portion of the meeting” was given over to the revision task. The committee was requested to determine by questionnaire the wishes of the membership as to purposes, doctrinal statement, and classes of membership. Approximately 200 returns were received and tabulated.

A majority of the Fellows preferred a less specific statement of purpose while a considerable majority of the associate members preferred a more specific statement. Both Fellows and associate members tended to favor one of the extreme positions in preference to the central position.

Preference as to doctrinal statement indicated that a large majority of the Fellows favored a more general statement while a large majority of associate members favored a more detailed statement. Again, both Fellows and associate members tended to favor one of the extreme positions in preference to the central position.

As to membership classification, both the Fellows and associate members favored the establishment of four classes of membership for the Affiliations.

Dilworth’s summary and evaluation of the detailed results of the returns from the questionnaire follows:

The questionnaire has shown that the voting members of the ASA, the Fellows, are predominately in favor of generalizing the statements of purpose and doctrine; while the Associate Members who constitute a much larger group, are predominately in favor of making the statements of purpose and

doctrine more specific. Both the Fellows and Associate Members are agreed in being opposed to adopting a middle-of-the-road position. Thus it seems to me that if the Committee were to recommend leaving the constitution in essentially its present form, the overwhelming majority of the membership will be dissatisfied and a vigorous growth in influence and membership will become highly unlikely. But if the Committee should decide to strengthen the statement of doctrine and purpose, then a majority of the Fellows will be highly dissatisfied and will likely cease to support the organization. Since they represent the most competent and active members of the Affiliation, the ASA will clearly decline both in competence and prestige. Finally, if the Committee should decide to definitely generalize the statements of doctrine and purpose, then we face the possibility of losing a large part of our Associate membership.

... We are clearly at a cross-roads point in the development of the ASA and the decision which is made in this matter will surely have a profound effect for better or worse on the future development of the Affiliation.

During their meeting of 21 April 1956, the Executive Council agreed that the major policies of the ASA should be determined by the Fellows. They also agreed that, although the results of the questionnaire did not warrant immediate action on the issues of revised statements of purpose and doctrines, the committee was asked to continue their work and submit recommendations as they saw fit. This work stretched over several years. At last, a fourth draft (see Appendix 4) was submitted to the Fellows which was adopted 11 May 1959 on a vote of 24 to 10.

The constitutional revision activity of the 1951–1959 period seemingly resulted in constitutional wording of essentially lasting quality with a renewed emphasis on the role of the Fellows in determining the destiny of the Affiliation. A minor revision approved 6 January 1970 introduced an even briefer doctrinal statement and provided for five classes of membership: Member, Fellow, Associate, Emeritus, and Honorary Fellow. A copy of this constitution may be found in Appendix 5.

Incorporation

Realizing the benefits of tax deduction of gifts, Everest wrote the Secretary of State of California 28 October 1942 asking for information on the procedures to file articles of incorporation. In a 17 June 1943 letter, it was

stated that Everest sought authority of the Executive Council to file such articles. Articles of incorporation were duly filed 23 August 1943 with affidavits showing Everest (President) and Cowperthwaite (Secretary-Treasurer) affirming the authorization of the organization. A copy of these original articles may be found in Appendix 6.

In 1958 the question arose whether incorporation in California was proper for an organization with headquarters in Illinois. The Executive Council in their minutes of 21 March 1959 authorized Henry L. Brinks, lawyer/ASA member, to proceed toward incorporation in Illinois if he deemed it advisable. This was subsequently accomplished. By 1981, however, the ASA office had been moved to Massachusetts, and we find the eastward movement of ASA headquarters is followed by state incorporation a couple of decades later.

Tax exempt status of the ASA has been carefully monitored at least since 1959. The IRS assures tax exempt status is a 990-A form filed each year before 15 May.

Executive Council Rotation

An Executive Council of five developed from the fact that there were five founding members at the 1941 meeting in Chicago. The plan for one member to retire each year is not mentioned in the minutes of that first meeting (Appendix 1). However, the rotation plan is a part of the first constitution.

The application of the rotation plan was affected by Van Haitsma's poor health and desire to be relieved of further responsibilities. It was also affected by the fact that it was some time before procedures were initiated for voting in new members who could become candidates for Executive Council. As these things were worked out during 1942, the initial rotation shown in Appendix 8 was established to the satisfaction of each individual. Van Haitsma retired in 1942, Cowperthwaite in 1943, Sturgis in 1944, Stoner in 1945, and Everest in 1946. By that time, the full five-year term was established for each newly elected Executive Council member.

The complete list of Executive Council members from 1941 to 1985 is shown in Appendix 8.

Prior to the adoption of the 1950 constitution, the Executive Council members were elected by the single grade of members existing at that time. When the 1958 constitution was adopted, two grades of membership

were instituted: Members and Fellows. Executive Council members are elected by both Members and Fellows although election of officers is an internal matter of the Council. Fellows are elected by Fellows.

Some Executive Council members have been elected for a second term of five years. Everest was the first in 1947 and Russell L. Mixter of Wheaton College was the second in 1950. The third such re-election was Harold H. Hartzler in 1956. About 1950 the question arose as to whether re-election for a second 5-year term was legal. A committee reported that there was no constitutional prohibition of it. However, once the affairs of the Affiliation had settled and the roster of qualified members had grown, the practice of electing to a second term disappeared.

Officers

A compilation of all officers of the Affiliation for the period 1941 to 1985 is shown in Appendix 9.

The officers of the Affiliation are drawn from the ranks of the Executive Council and are elected by the Executive Council. The term of office is one year. Re-election to a given office has occurred a number of times. For example, Everest was president for the first ten years (1941–1950), Marion D. Barnes was secretary-treasurer for five years (1944–1948), Allan A. MacRae was vice president for four years (1946–1949), Russell L. Mixter was president for four years (1951–1954), Brian P. Sutherland was vice president for four years (1953–1956), and H. Harold Hartzler was president for six years (1955–1960). After about 1960, there was such a wide selection of talent available that the practice of re-electing became rare.

Executive Secretary-Executive Director

As the membership and activities of the Affiliation grew so did the burden upon the elected Executive Council members and officers who were carrying on ASA duties in addition to full-time employment. Having an officer who would devote full time to the work of the Affiliation and an established central office address complete with secretary was surely a dream of every Executive Council member starting in 1941. But the costs were quite beyond the modest budgets upon which the early ASA was established.

In the Executive Council minutes of 19 February 1955, there is indication of positive thinking toward the goal of employing an executive secretary.

In the minutes of the 30 March 1957 meeting, the need was once more expressed and the action of contacting prospective persons to fill such a position was taken. After looking over the field, the council agreed upon the one person who had carried such a heavy load as an unpaid officer, President H. Harold Hartzler. Hartzler was hired on a part-time basis as Executive Secretary effective 1 April 1961. A headquarters office was established in Mankato, Minnesota, to be close to his home and employment as a professor of physics at Mankato State College. By this move, the work of the Affiliation was moved to a new and higher level as Hartzler, with his usual enthusiasm and vigor, applied himself to the task during the eleven years he filled this office.

President McIntyre recognized the significant contribution to the ASA growth and development Hartzler had made as Executive Director as he was relinquishing the position:

One thinks first of all of his enthusiasm for the ASA. It is always present, not only at conventions and Executive Council meetings but, more important, between meetings when it is so easy to become completely occupied with other matters. Harold is the conscience of the Executive Council in keeping it effective throughout the year.

Of similar significance is the role that Harold has played as a unifying force in the ASA. Although his beliefs are probably with the more conservative members of the ASA, his view for the ASA has included all Christians in agreement with the ASA statement of faith.

It is recorded in the minutes of their meeting of 16–17 April 1971 that the Executive Council decided to launch out on a program of expansion of the Affiliation. This, of course, required money, and a task force to seek gifts to finance the expansion was headed by President McIntyre. A full-time executive secretary was envisioned in this expansion. The Council hired William D. Sisterson as Executive Secretary (later changed to Executive Director). He started 15 August 1972 and a month later the headquarters office was moved from Mankato, Minnesota, to Elgin, Illinois. Sisterson had been with the Intervarsity Christian Fellowship before coming to the ASA. He had a BSIE degree from Southern Methodist University and a ThM from Dallas Theological Seminary. He instigated many orderly procedures in conducting the business of the ASA and traveled widely for personal contacts with ASA members. After serving eight years, he resigned just before the 1980 convention at Taylor University. In his memorandum of resignation to the Executive Council dated 25 July 1988, Sisterson stated:

I hope you will give careful consideration as to how to fill this position in the future. I believe that there would be considerable advantage in having an Executive Director that would have some substantial scientific credibility and good communication skills to help us interface with groups and individuals outside our affiliation.

There was a great and immediate need for someone to replace Sisterson. As an interim measure, Harry Lubansky, a biochemist, was hired. He was about to complete a post-doctoral fellowship in the Department of Physiology at the University of Illinois Medical Center and had accepted a part-time faculty position at Judson College in Elgin, Illinois. In January of 1981 the ASA office was moved from the basement of the Sisterson home to Judson College on a temporary basis. Lubansky served commendably for less than a year.

On 1 June 1981 Robert L Herrmann was appointed as full-time Executive Director of the Affiliation. Once more, the most qualified candidate for the post of executive director was found serving diligently on the Executive Council. Herrmann came with outstanding personal and scientific credentials. A native of New York City, Herrmann earned the PhD degree in biochemistry at Michigan State University in 1956. He spent the next three post-doctoral years in the Department of Biology at MIT and then, in 1959, joined the faculty of Boston University School of Medicine. In 1976 he moved to Tulsa where he became the first chairman of the Department of Biochemistry at Oral Roberts University Schools of Medicine and Dentistry. In 1977–1979 he also served as associate dean for Biomedical Sciences. He was a member of the Board of Trustees and chairman of the Medical Ethics Commission of the Christian Medical Society. He is the author of some seventy-eight publications, a number of them on Christian ethics and other topics related to Christian philosophy. He terminated his connection with Oral Roberts University and the Christian Medical Society as he assumed the position of Executive Director of the ASA. One third of his time was to be spent in some academic activity. Teaching at Gordon College was the initial academic link.

The ASA office was moved from Judson College to Herrman's home as he took office. As the magnitude of the work grew, it was necessary to move office activities from the home office to an office in downtown Ipswich, Massachusetts, without changing the P.O. Box address.

Without denigrating the contribution of those who held the position of Executive Secretary and Executive Director in the past, it can be said that

Herrman has brought a combination of academic and spiritual qualities, vision, and executive abilities to the job which bode well for the highest aspirations held for the ministry of the ASA.

Promotion and Publicity

Richard H. Bube wrote in 1968:

The ASA is not visible in the world today. It is almost unknown even among evangelical Christian men of science, and it is completely unknown to the non-Christian scientific community. This is in spite of 26 years of existence, and a membership which covers every state in the union. It is in spite of the high level of education and the positions of responsibility held by its members ... I had occasion to speak with the Religion Editor of the *Palo Alto Times*. "How is it possible," he asked, "that the ASA could have existed for twenty-six years? I have served on religion pages of papers all over the country, and I have never heard of it!"⁴

For one thing, few books, monographs, magazine articles, and *Journal* papers have been published. For another, reaping column inches in the press requires an expertise not dominant in the ASA. There also has been a feeling that we may not yet be ready for wide publicity; not prepared to handle it if it comes.

Every convention committee has tried to get something in the local paper about what was happening "up on the hill." These efforts were all too often amateurish and unsuccessful.

A certain indecisiveness has characterized ASA promotional activities. The basic wide spectrum of views, considered a virtue within the ASA, has made it more difficult to find a consensus to share with the outside world.

Acknowledging a monstrous deficiency in letting the world know about ASA, little stabs at it have especially characterized the early days. Some publicity has been of the unsolicited, negative type. For example, in Appendices 10, 11, and 12 are three very early examples of the ASA and an ASA member providing the ammunition for Keith L. Brook's anti-science blockbusters. Appendix 13 shows two typical clips from local papers which have accompanied conventions, launching of books, etc.

Appendix 14 shows a favorable 1949 review of *Modern Science and Christian Faith* from *His Magazine*, published by InterVarsity Christian Fellowship.

Occasionally an ASA member, like Martin Karsten, was given the job of covering an event, in this case the 1950 convention at Goshen College, for his own religious paper, the *Calvin Forum*. (Appendix 15)

ASA member, Richard H. Bube, wrote on “God’s Revelation in True Science and in the Scriptures” for the *Collegiate Challenge* magazine (Appendix 16). Another ASA member let his views be known in his school’s paper in Appendix 17.

Breaking into the secular press has much to commend it and a few such attempts have been crowned with success. In Appendix 18 is shown a 1962 *Time* magazine article on “Faith and the Scientist.” ASA member Dr. George K. Schweitzer aired his views on this article through the letters to the editor section.

James Kraakevik, ASA member, had a feature article, “The Christian Intellectual” published in his school’s alumni paper. This is an important theme, handled on a high level, which can be a valuable contribution to students (Appendix 19).

An occasional Christian paper has picked up the activities of ASA conventions such as *Evangelical Newsletter* did at the Stanford University convention in 1979 (Appendix 20).

These are but samples of what has happened in the earlier days of the ASA more or less accidentally, that is, without strong pressure from the ASA hierarchy. In more recent years, there have been many planned assaults on both secular and religious strongholds and, as the purposes of the ASA are better formulated and acted upon, we can expect a continuing upgrading of the ASA image in the popular mind.

Membership

Growth in numbers has been a primary concern within the American Scientific Affiliation since the beginning. About one third of the minutes of the organizing meeting in Chicago in 1941 (Appendix 1) is given over to considering prospective members and assigning them to one of the five founding members to follow up. It has always been recognized that the larger the ASA membership, the greater its influence in both church and secular circles, the greater the mutual fellowship and confidence inspired, and the greater the financial base for publications and other forms of outreach. The most important factor in membership growth has always been person-to-person influence.

Growth of Membership

A study of ASA membership growth has been made with the results shown in Appendix 21. The data have been assembled from numerous sources, primarily counts in membership directories issued to the members. A list of these directories follows:

1. 1946 Yearbook
2. 1947 Yearbook
3. 1952 mimeographed directory
4. 1953 directory in *JASA* Vol 5, No 4
5. 1956, December, Supplement to *JASA* Vol 8, No 4
6. 1961, June, Printed directory with constitution and by-laws.
7. 1965, February, Printed
8. 1972, April, Printed
9. 1974, August, Mimeographed
10. 1983, Printed

The data of Appendix 21 are plotted in graphical form in Fig. 1. This graph shows that prior to about 1949 the rate of growth was very slow as would be expected starting from five members and relying solely on personal contacts amid wartime constraints. Between 1950 and about 1970 there was a reasonably constant growth rate of about seventy-five new members per year. Between 1972 and 1977 the growth rate increased because of an advertising campaign. This campaign did not double the membership in a short time, as predicted, but it did increase membership by more than a third. The cost and results of the campaign is another story which will be discussed elsewhere.

The peak of membership of about 2700 was reached about 1977–1978. Since that time there has been a leveling off at about 2200 members. Factors affecting this loss of members will be discussed in greater detail in a later chapter.

Member Classification

In the original constitution (Appendix 2) a single class of membership was authorized. In August of 1950 a revised constitution (Appendix 3) specified four classes of member: Fellow, Member, Associate, and Honorary Fellow. The constitution adopted in 1970 was similar, with Emeritus grade added.

The distribution of the total membership between these categories is graphically portrayed in Fig. 1 and shown in the tabulation of Appendix 21.

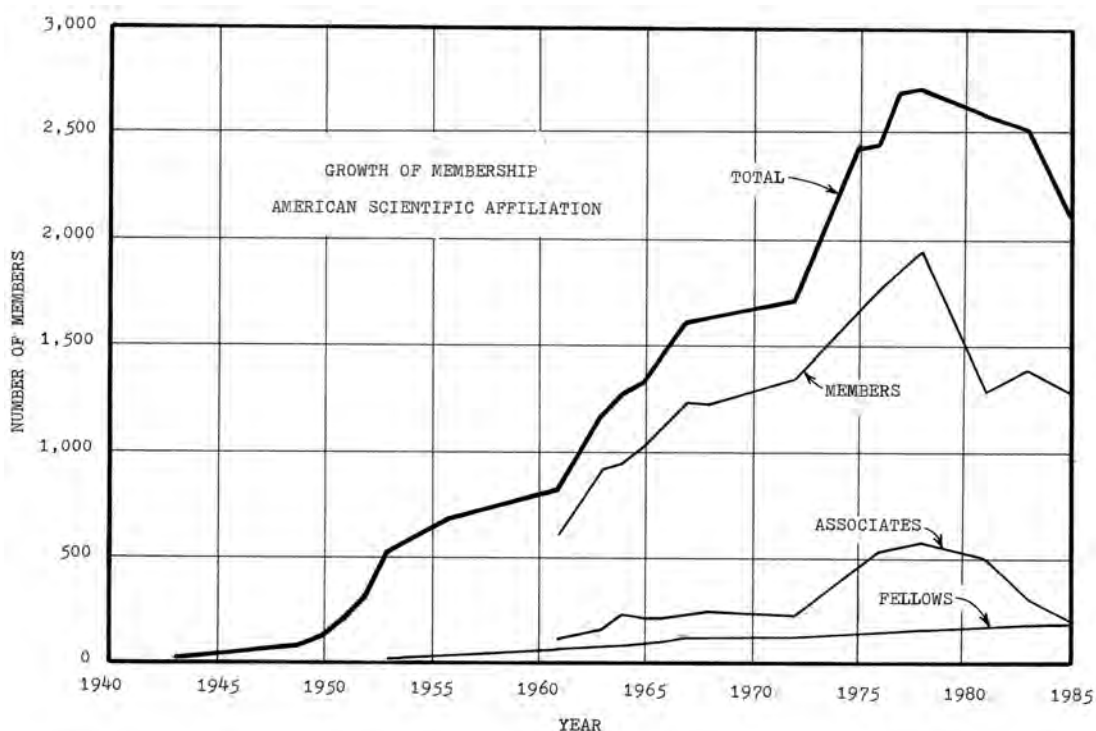


Figure 1. Growth of ASA Membership

In addition to the formal four main categories of membership specified by the constitution, various sub-categories were elaborated in the by-laws. For example, a student membership with lower membership fee was considered very important to the future growth of the Affiliation. Qualified missionaries have received membership with no fee required. In fact, in 1958 the missionary concept was expanded to cover retired missionaries and those on furlough.⁵

The Honorary Fellow classification was intended to give special recognition to those few who have made especially significant contributions to sciences and/or to the Christian community. The Honorary Fellow list is short, but distinguished:

- Frank Allen
- William A. Smalley
- Allan A. MacRae
- Bernard Ramm
- Oliver R. Barclay
- Donald M. MacKay

Local Sections

*“It seems very desirable for the members who can
to get together for mutual stimulation.”*

This principle, excerpted from a circular letter dated 26 January 1942, has been deeply embedded in ASA thought from the very first. During the remaining months of 1941, after the organizing meeting, and during 1942, numerous meetings of those interested in the work of the ASA were held in Los Angeles, Chicago, and Boston areas, each organized by a founding father living nearby. Papers were presented, potential members introduced, and ongoing projects of the ASA discussed.

Local sections have probably contributed as much to the growth and maturity of the ASA as the annual conventions. Only about 10% of the members have registered at any given annual convention. The local sections have provided the only personal contact with other members for most of the others. In spite of the high value universally accorded local section activity by ASA administrations through the years, the steps taken toward encouraging such activity have been sporadic and often casual. The growth and development of local sections seemed always to be due to the presence of one or a few members willing to invest time, energy, and money in the task. This dedication of one or more sparkplugs has resulted in remarkably successful local sections in certain areas over certain periods of time.

In 1957 the first national secretary for local sections was appointed. His extensive report to the membership at the 13th Annual Convention of the ASA at Iowa State College pointed out the obvious values of local sections, such as gaining the attention of prospective members, discovering talent, and providing a forum for membership participation.⁶ Of the seven local groups active at the time, none had been formally recognized by the Executive Council. The North Central Section was the first so recognized (August 1960) with the Los Angeles Section following in October of that year. However, neither the appointment of a national secretary or official recognition has been able to replace that vital “sparkplug.” Probably the greatest impetus toward encouraging the formation and development of local sections has been the establishment of *ASA NEWS* in 1959. The reporting in detail of interesting topics and speakers of successful local section meetings has been a great encouragement to others.

Growth of Local Sections

Until the appearance of *ASA NEWS* in 1959, communication between local groups was negligible. Few records of local meetings prior to 1959 reached headquarters and fewer still have been preserved. In the *ASA NEWS*, however, is a substantial body of information of interest. No matter how diligent the *NEWS* editor, he was dependent upon the local section secretary informing him of meetings held. Unfortunately, only an unknown percentage did this, hence the data from *ASA NEWS* is incomplete. It is possible that only approximately half the meetings held have been reported.

During the twenty-five years between 1960 and 1984, a total of 304 section meetings were reported in *ASA NEWS* covering the activities of eighteen local groups, as shown in the tabulation of Appendix 22. The San Francisco Bay group has shown, by far, the greatest activity with sixty-three meetings or an average of 2.5 meetings per year. The Metropolitan New York group had thirty-nine meetings over the same twenty-five years, an average of about 1.5 meetings per year. Others, such as the Chicago, Indiana, Grand Rapids, and New England sections have showed consistent activity over the same period, but at a more modest level. Many of the local groups show great activity for a few years and then fade away. The San Francisco Bay and the Metropolitan New York groups have lead the way in revealing the potential of the whole idea of local sections.

Of the 304 sections whose local meetings were reported in *ASA NEWS* over the 25-year period, only 37% of them mentioned the number of people attending. The size of the audience of those reporting varied from 12 to 400 with an average of 66 persons per meeting. It is probable that the bigger the crowd, the more likely that the attendance was reported but this possible bias should not reduce very much the average figure of 66 per meeting. Even if there were only an average of fifty persons per meeting, sixty local section meetings per year would mean that 3,000 people were involved as compared to 100 to 200 at the annual convention.

Local Section Topics

Each local section meeting might be for an evening, a Saturday with morning, afternoon, and possibly evening sessions, or a weekend conference. It may be characterized by a single speaker, local or invited, a panel of speakers on a given theme, or no speaker at all as books have been reviewed by the members. This great variability in type of meeting has made analysis difficult, but Appendix 23 is an attempt to place each meeting topic in one of twenty-seven categories. This study also covers the

same twenty-five years from 1960 through 1984. It should be understood that placing a given reported topic in one of these 27 categories is a very subjective process. Many topics are dual in nature: “Vitalism vs. Mechanism,” “Science and Religion,” “Ethical Decisions in Science.” Some give no hint of their subject matter others are not even listed. With such obstacles, a best guess has been made for each listed topic for the 304 meetings; results in Appendix 23.

The total number of papers presented for each five-year interval from 1960 through 1984 is plotted in Figure 2. There was a steady climb between 1960 and 1970 which conformed to the increase in number of local section meetings over the same period. The 1975 and 1980 intervals, however, were on a downward trend. One interesting observation in comparing

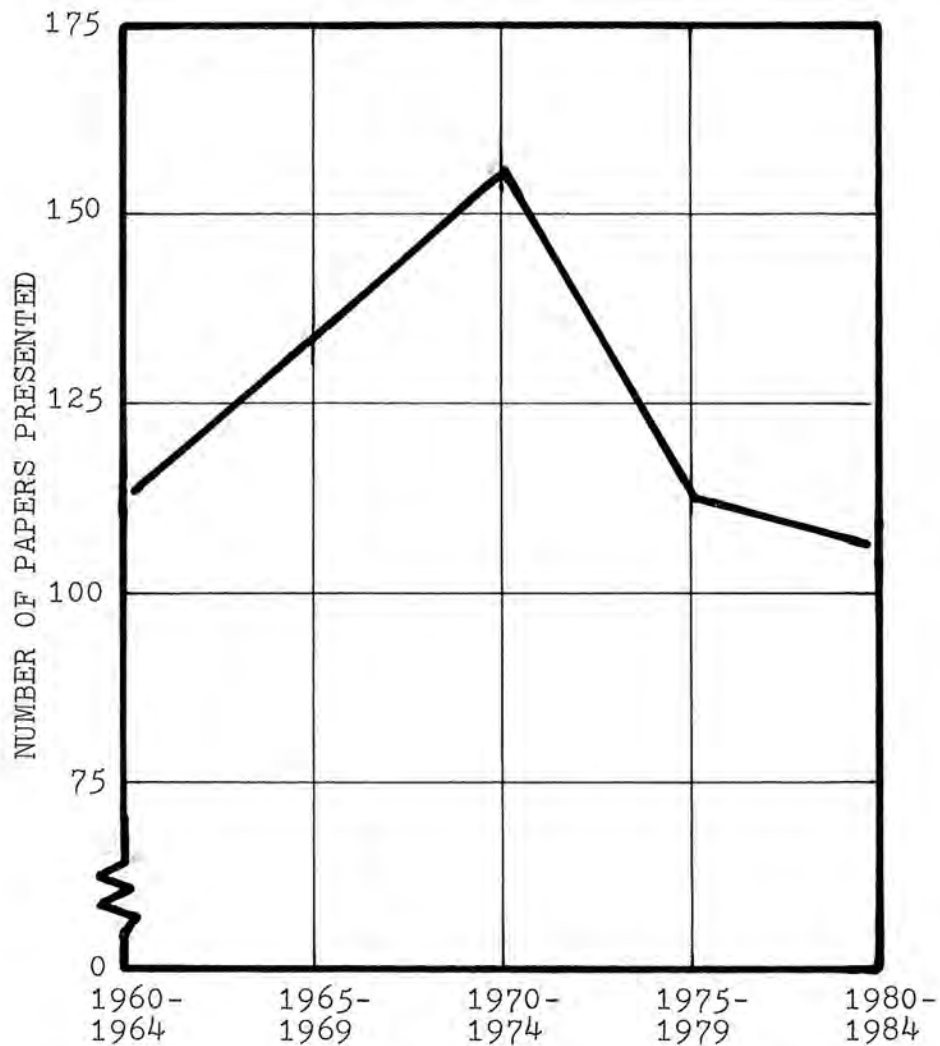


Figure 2. Presentations at Local Section Meetings

Appendices 22 and 23 is that an average of between two and three topics were listed for each local section meeting. It would appear that diversity in either topics or speakers or both worked best at the local level.

The data of selected categories of Appendix 23 are shown graphically in Figure 3. Contrary to the impression some may have, the creation/evolution category was eclipsed by the social sciences. Both were eclipsed by human engineering (biochemistry) during the 1980–1984 interval. It is seen that local section topics followed the major scientific interests of the day and that emphasis on the creation-evolution controversy declined steadily after

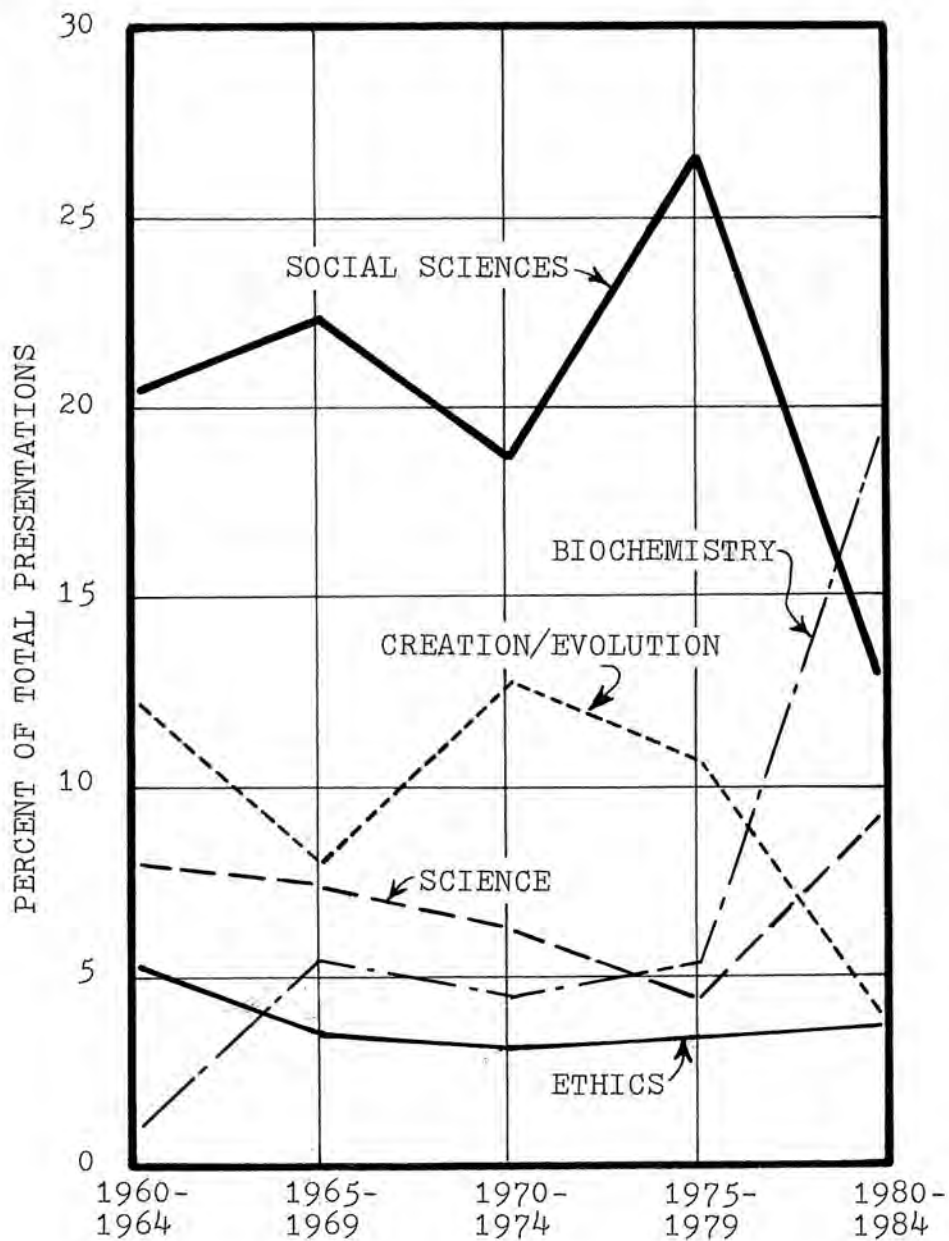


Figure 3. Subject Categories of Local Section Meetings

the early 1970s. This correlated with the drifting of some confirmed creationists from the ASA to the Creation Research Society.

Chapter 2

References

¹*Journal of the American Scientific Affiliation* 21, no. 2 (June 1969): 59.

²*Journal of the American Scientific Affiliation* 1, no. 3 (June 1949).

³Minutes of the ASA Executive Council, 21 April 1956.

⁴Bube, Richard H., "The Relationship Between the ASA and the Scientific Community," *Journal of the American Scientific Affiliation* 20, no. 1 (March 1968): 3.

⁵Minutes of the ASA Executive Council, 26 August 1958.

⁶Everest, F. Alton, "Report on Local Sections," 26 August 1958.

American Scientific Affiliation Conventions

1941–1945 Wartime Restrictions

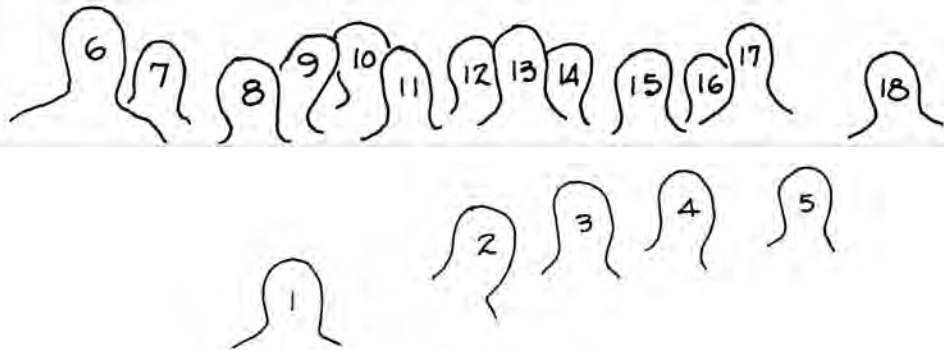
At the beginning of the United States involvement in World War II, 7 December 1941, the membership stood at five, the original organizing group. At the close of the war, August 1945, the membership was about sixty. Although there were hopes of calling a national meeting during the war, it proved to be quite impractical. The Executive Council members were preoccupied with wartime duties. Sturgis was deeply committed in the Navy educational program in his school. Cowperthwaite was chief engineer in an industrial plant vital to the military. Van Haitzma was ailing physically. Stoner was head of the mathematics department at Pasadena City College, considered to be a vital activity to the nation's defense. Everest was directing fundamental research in undersea acoustics for the National Defense Research Committee. In addition to this personal preoccupation, travel was limited: before a train or plane ticket could be obtained, a "priority" had to be obtained. Gasoline was tightly rationed. Hope for a national ASA convention during the war years were dashed to the ground and ASA members were too busy to be greatly concerned about it.

With the success of the military campaign in the Pacific, hopes for an end to the war grew and plans were made for a national convention in 1946. Annual conventions have been held every year since this pioneering, yet small, assembly at Wheaton College. Rather than be overwhelmed by the detail of all sixty-three conventions between 1946 and 2008 listed in Appendix 24, it may be instructive to look closely at the first four conventions. The growth in sophistication and numbers during these early years underline some important strengths in the foundation of the American Scientific Affiliation.

The First ASA Convention (1946)

With a local convention committee at Wheaton College headed by Russell L. Mixer and a program committee led by Everest, the first convention got under way, complete with a printed program. Each day was started with a devotional period, a practice which has been followed in subsequent conventions.

First American Scientific Affiliation Convention 1946, Wheaton College



- | | |
|----------------------|-----------------------------|
| 1. Hawley O. Taylor | 10. Brian P. Sutherland |
| 2. Edwin Y. Monsma | 11. H. Harold Hatzler |
| 3. Marion D. Barnes | 12. R. Laird Harris |
| 4. Allan A. MacRae | 13. Clarence L. Nystrom |
| 5. Russell L. Mixer | 14. Paul E. Parker |
| 6. William J. Tinkle | 15. R. L. Cook |
| 7. George Horner | 16. Paul DeKoning |
| 8. Mrs. Monsma | 17. Roger J. Voskuyl |
| 9. Martin Karsten | 18. Irving A. Cowperthwaite |

Figure 4. First American Scientific Affiliation Convention 1946, Wheaton College

The film, “God of Creation,” the first of the Moody Institute of Science Sermons From Science films which had already been approved by the newly formed ASA film review committee, was screened for further review and official approval.

Only Irving A. Cowperthwaite of the five founding members of the ASA was able to attend this first convention. Everest, of the other four, had the best excuse, a serious case of the mumps. In his absence he was nominated for another five years on the Executive Council. This unusual nominating procedure has been followed in only a few other instances (Mixer in 1950, Hartzler in 1956).

Probably the most significant outgrowth of this first convention was that it led directly to the first “Yearbook,” the forerunner of the *Journal of the ASA*. This Yearbook contained a message from the president (Everest), information from the Secretary-Treasurer (Barnes) on finances, vital statistics of new members, a membership list, a bibliography of 304 books on science/faith, and an extensive summary of the Wheaton convention including a list and photograph of registrants, and all the papers presented which could be extracted from the authors in written form. There is no denying the pivotal nature of this first convention of the American Scientific Affiliation.

A photograph of most of those attending this first convention is shown in Fig. 4 and a reproduction of the convention program may be found in Appendix 25.

The Second ASA Convention (1947)

An especially resourceful convention planning committee headed by Irving Cowperthwaite was a feature of this convention. Other members included Paul DeKoning, Laird Harris, Russell Mixer, and William Tinkle. Working entirely through the mails, the will and opinion of the group was first determined by a lengthy survey. One decision that had to be made was deciding on whether to accept the invitation of Taylor University or Michigan State University as venue of the convention. The vote was 6 to 1 in favor of Taylor (the President and Secretary-Treasurer also voted). There is no record of the reasons pro or con, but it is possible that there was a feeling of not yet being ready to meet on a secular university campus. Eleven years later, the first ASA convention was held at a secular university (1958, Iowa State University). Such reticence may have better demonstrated wisdom than cowardice.

**1947 American Scientific Affiliation Convention
Taylor University, Upland, Indiana**



- | | |
|----------------------------|-------------------------|
| 1. William J. Tinkle | 10. J. McCleery |
| 2. Irving A. Cowperthwaite | 11. E. N. Gathercoal |
| 3. R. Larid Harris | 12. Cecil B. Hamann |
| 4. Paul Bender | 13. Hendrik J. Oorthuys |
| 5. Russell L. Mixer | 14. J. Frank Cassel |
| 6. Paul DeKoning | 15. Milo Rediger |
| 7. F. Alton Everest | 16. Roger J. Voskuyl |
| 8. H. Harold Hartzler | 17. Edwin Y. Monsma |
| 9. Joseph Maxwell | 18. Alfred C. Eckert |
| | 19. Marion D. Barnes |

**Figure 5. 1947 American Scientific Affiliation Convention
Taylor University, Upland, Indiana**

The promotion of the convention among the 80-odd (pun unintended) members was accomplished by a series of letters prepared by the committee members. DeKoning wrote enticingly of papers on the agenda on anthropology, the age of the earth, philosophy of science, and geology.

The next missive from Mixter boosted Cornelius Jaarsma and his qualifications for speaking on “The Philosophy of Science.” Next came Tinkle’s letter on Cecil B. Hamann’s presentation, “Scientific Confirmation of the Bible.” Harris’ letter promoted Francis R Steele’s paper, “The Christian Approach to the Student Mind.” President Everest’s letter mentioned the “veritable avalanche” of letters promoting the convention and then added this statement, “The public phase of our ministry is imminent.” Although he had reference to the so-called *Christian Students’ Science Symposium* book soon to be published, the public phase of the ministry of ASA, in its fuller sense, is yet to be realized forty years later.

Of the unusual and valuable papers presented, Stoner’s paper devastating Panin’s *Bible Numerics* must be mentioned as well as Bernard Ramm’s first of many subsequent presentations before the ASA, “The Spiritual Interpretation of Science by Jeans and Eddington.”

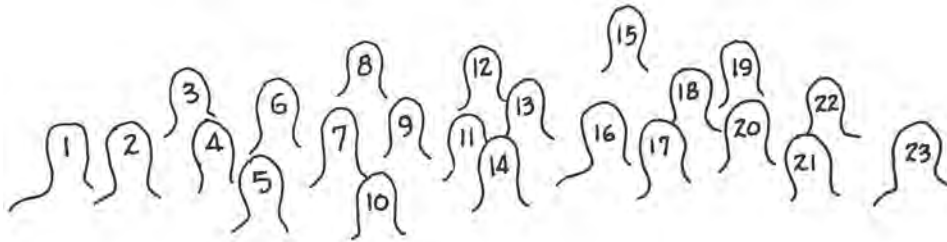
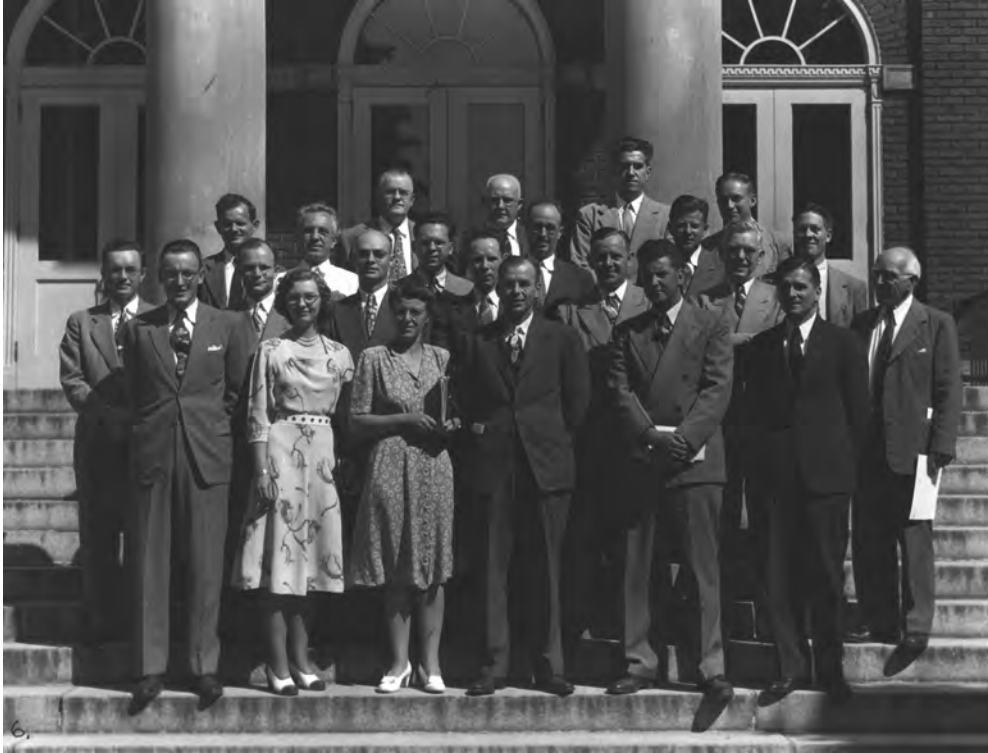
This second convention moved up a notch or two in depth of treatment of topics, attendance, organization, and planning. The convention photograph is shown in Fig. 5 and the convention program in Appendix 26.

The Third ASA Convention (1948)

Of all the 40 or so ASA conventions, this one held at Calvin College, Grand Rapids, Michigan, in 1948, is the only one that has a complete transcript of all sessions taken down by a court reporter. The 184 pages give word-for-word coverage of all business sessions and discussions of papers, everything but the papers. We can thank someone in the local committee for such foresight as this transcript has almost an archaeological aura about it as viewed in the hindsight of almost 40 years.

This was the first ASA convention in which J. Laurence Kulp participated. The ASA was thirsting for authoritative geological information, yet some were a bit wary of the field in general. Here was Kulp, a member of a Plymouth Brethren church, with a Ph.D. in chemistry from Princeton and another Ph.D. in geology from Columbia. He presented a paper on “Hominoid Fossils.” The interaction with those holding to a very literal interpretation of Genesis is detailed in the transcript.¹ This was a microcosm of the ASA at its best as the extremes of views met in the search for truth, with mutual respect, and in good humor. In a letter to Kulp shortly after this convention this was summed up ... “I like the attitude of tolerance expressed by the several members.”²

**1948 American Scientific Affiliation Convention
Calvin College, Grand Rapids, Michigan**



- | | |
|-----------------------|-----------------------------|
| 1. Marion D. Barnes | 13. Allan A. MacRae |
| 2. Laurence J. Kulp | 14. |
| 3. H. Harold Hartzler | 15. F. Alton Everest |
| 4. Russell L. Mixer | 16. Martin Karsten |
| 5. Cordelia Erdman | 17. |
| 6. | 18. Hendrik J. Oorthuys |
| 7. Roger J. Voskuyl | 19. Irving A. Cowperthwaite |
| 8. Joseph S. Maxwell | 20. Edwin Y. Monsma |
| 9. Paul DeKoning | 21. Paul Bender |
| 10. Alta Schrock | 22. |
| 11. | 23. Edmund N. Gathercoal |
| 12. John R. Howitt | |

**Figure 6. 1948 American Scientific Affiliation Convention
Calvin College, Grand Rapids, Michigan**

In addition to papers on Moses' hygienic pronouncements and the pros and cons of evolution, this 1948 convention is noted as having the first



Figure 7. 1948 Convention Committee

Left to right: DeKoning, Karsten, Maxwell, Monsma, Bender
(Cassel absent)

paper presented before the ASA on psychiatry as Beukema considered the "Christian Treatment of the Mentally Ill." This was a foreshadowing of the great interest in the social sciences dominating the ASA in later years. The solid scholarship of Allan A. MacRae was again shared with the public in an evening session. A photograph of those attending the convention is shown in Fig. 6 and the convention committee in Fig. 7. The convention program is in Appendix 27.

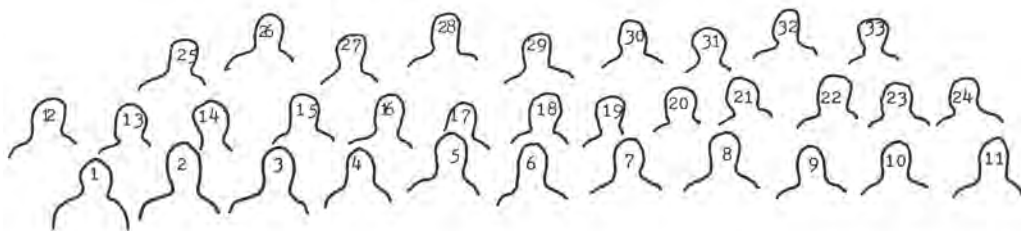
The Fourth ASA Convention (1949)

The fourth ASA convention may have appealed (at least subconsciously) to some of the less worthy motives of the membership. First, it was held in Los Angeles and, unbelievable as it may sound, this city had some attraction even before Disneyland. Second, the list of field trips was both extensive and irresistible. There were also some good papers on the program.

A trip to Mount Wilson Observatory gave the opportunity to inspect the five telescopes and see how Edwin Hubble carried out his measurements which led to the expanding universe concept. Another more extensive trip to the Palomar Observatory gave a close view of the 208-inch Hale telescope as well as considerable expanse of California beaches en route. A stop was made at the historic old mission at San Juan Capistrano, famous for its swallows, and Knott's Berry Farm, not so historical but just as famous for its chicken dinners. The fossils obtained from the La Brea asphalt deposits were inspected both in situ and at the Los Angeles County Museum. A visit to Moody Institute of Science, described in California

hyperbole as “The World’s Biggest Little Studio,” gave opportunity for a behind-the-scenes view of film production, preview of “Dust or Destiny” in production, and Sermons From Science demonstrations.

**The 1949 ASA Convention
The Bible Institute of Los Angeles
Los Angeles, California**



- | | | |
|----------------------------|------------------------|-------------------------|
| 1. | 12. | 23. Hendrik J. Oorthuys |
| 2. H. Harold Hartzler | 13. | 24. |
| 3. | 14. | 25. |
| 4. Peter W. Stoner | 15. | 26. Barnard Ramm |
| 5. F. Alton Everest | 16. Bolton Davidheiser | 27. John K. L. Yong |
| 6. Allan A. MacRae | 17. | 28. Carol F. H. Henry |
| 7. Hawley O. Taylor | 18. Marie Fetzer | 29. |
| 8. Roger J. Voskuyl | 19. Cordelia M. Erdman | 30. |
| 9. Irving A. Cowperthwaite | 20. Frieda Monsma | 31. |
| 10. Phillip B. Marquart | 21. Edwin Y. Monsma | 32. George H. Fielding |
| 11. | 22. Paul Bender | 33. Brian P. Sutherland |

**Figure 8. The 1949 ASA Convention, The Bible Institute of Los Angeles,
Los Angeles, California**



Figure 9. A field trip to the LaBrea Tar Pits in Los Angeles was a feature of the 1949 ASA Convention. Here ASA members study a replica of the giant sloth which lived here in Pleistocene times. (Left to right): Allan MacRae, Roger Voskuyl, Edwin Monsma, Brian Sutherland, Alton Everest.

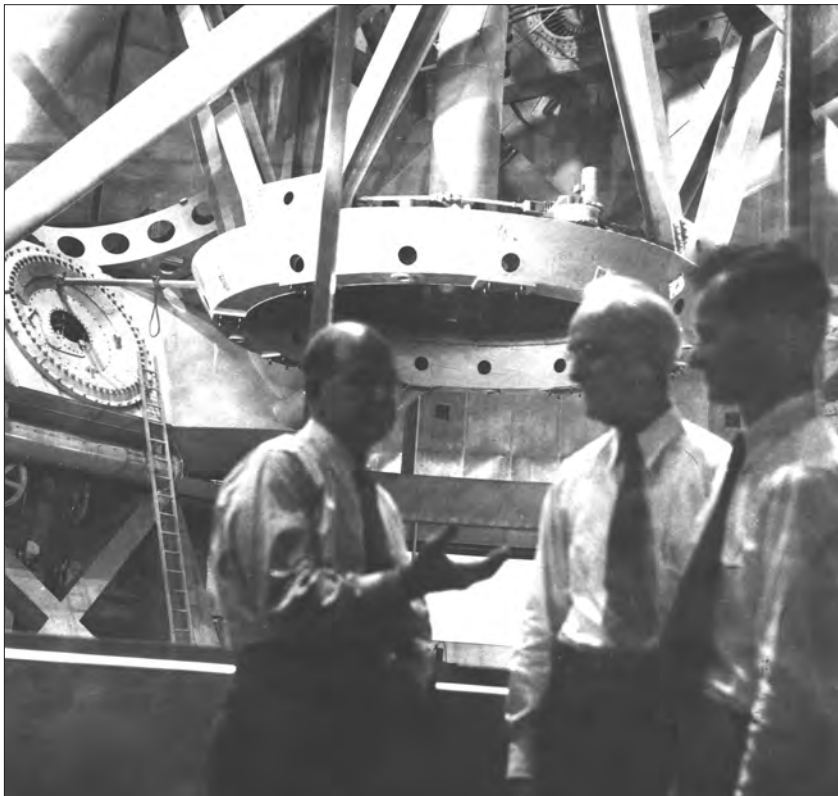


Figure 10. Peter Stoner describes the features of the 200-inch Hale telescope at Palomar on a field trip of the 1949 ASA Convention. Peter Stoner (left), Hawley Taylor, Harold Hartzler.



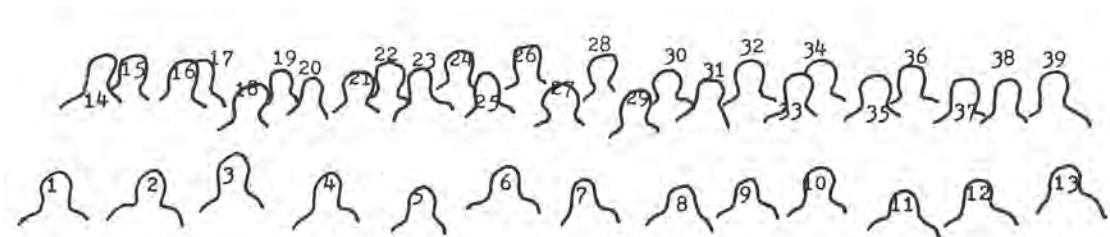
Figure 11. The Palomar field trip of the 1949 ASA Convention a success, the group prepares to return to Los Angeles.

A memorable scene and one symbolic of the influence of the ASA was the late George McCready Price quietly sitting in the front row as J. Laurence Kulp presented his paper on “Flood Geology.” This five-day convention allowed much serious discussion of valuable papers in spite of the time devoted to field trips. Figure 8 is the traditional convention photograph, but Figs. 9, 10, and 11 share the flavor of the field trips. The 1949 convention program is reproduced in Appendix 28.

Other Conventions

The photographs of Figs. 12–32 give a pictorial overview of convention activity of the 1959–1966 period.

**The 1950 ASA Convention
Goshen College, Goshen, Indiana**



- | | | |
|----------------------------|----------------------|--------------------------|
| 1. Irving A. Cowperthwaite | 14. | 27. |
| 2. | 15. | 28. |
| 3. Robert Fischer | 16. C. L. Nystrom | 29. Mrs. Gathercoal |
| 4. Karl Turekian | 17. | 30. |
| 5. Kendrik J. Oorthuys | 18. Mrs. Nystrom | 31. Edmund N. Gathercoal |
| 6. Alfred C. Eckert | 19. | 32. Edwin Y. Monsma |
| 7. | 20. Marie Fetzer | 33. Russell L. Mixter |
| 8. J. Laurence Kulp | 21. Cordelia Erdman | 34. |
| 9. Paul M. Wright | 22. Mrs. Oorthuys | 35. Joseph S. Maxwell |
| 10. Marion D. Barnes | 23. Donald Carr | 36. Delbert Eggenberger |
| 11. Wilbur Bullock | 24. | 37. Philip Marquart |
| 12. James O. Buswell III | 25. Peter W. Stoner | 38. H. Harold Hartzler |
| 13. Martin Karsten | 26. F. Alton Everest | 39. |

**Figure 12. The 1950 ASA Convention
Goshen College, Goshen, Indiana**



Figure 13. ASA Convention, Goshen College, 1950
Three members of the Executive Council discuss the merits of a pet rock.
Left to right: Russell Mixer, Laurence Kulp, Alton Everest



Figure 14. The Convention Committee, 1950, Goshen College
Left to right: Hendrik Oorhtuys, Edwin Monsma, Harold Hartzler, Alta Schrock,
Paul Bender.



Figure 15. Typical scene during presentation and discussion of papers at the 1950 ASA Convention, Goshen College, Goshen, Indiana.



Figure 16. Wilbur Bullock (left) greets Edmund Gathercoal at the 1950 ASA Convention at Goshen College.



Figure 17. Dr. J. Laurence Kulp discusses the precision of radiocarbon dating from the standpoint of an active worker in the field. 1950 ASA Convention, Goshen College.



Figure 18. Russell Mixter answers a question as Edwin Monsma holds the discussion period in check. ASA Convention, Goshen College, 1950.



Figure 19. Marie Fetzer (left), Cordelia Erdman, and Alto Schrock contributed much to the 1950 ASA Convention at Goshen College.



Figure 20. 1951 ASA Convention, Shelton College, New York



Figure 21a.
 Left to right:
 G. Douglas Young
 J. Laurence Kulp
 James O. Buswell III
 Wilbur L. Bullock



Figure 21b.
 James O. Buswell II
 James O. Buswell III

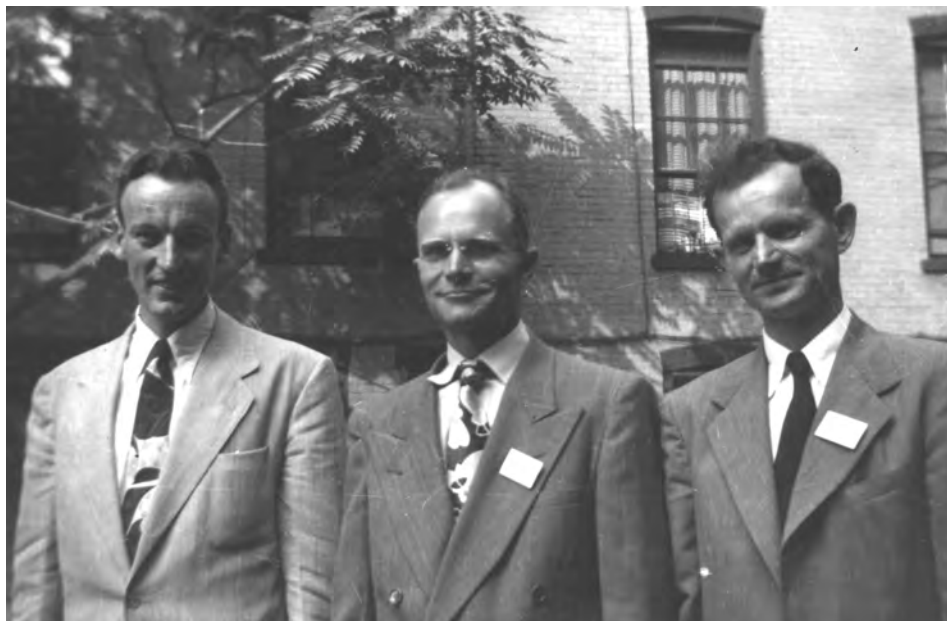


Figure 21c. 1951 ASA Convention, Shelton College, New York
 Left to right: J. Laurence Kulp, Russell L. Mixer, H. Harold Hartzler



Figure 22. ASA Convention, 1952, Wheaton College Science Station, Black Hills, South Dakota



Figure 23. ASA Convention 1952, Wheaton Science Station, Black Hills, South Dakota
Left to right: Joseph S. Maxwell, Peter W. Stoner, John C. Sinclair, Paul B. Stam, John R. Howitt.



Figure 24. Geological Field Trip, 1952 ASA Convention, Black Hills, SD
Left to right: Paul G. Culley, unidentified, Hendrik J. Oorthuys, H. Harold Hartzler, William J. Tinkle, Peter W. Stoner.



Figure 25. 1954 ASA Convention, Eastern Mennonite College, Harrisonburg, Virginia



Figure 26. 1956 ASA Convention, Wheaton College, Wheaton, Illinois



Figure 27. 1958 ASA Convention, Iowa State College, Ames, Iowa



Figure 28. 1959 Joint ASA/ETS Convention, Trinity Seminary and Bible College, Chicago, Illinois



Figure 29. 1960 ASA Convention, Seattle Pacific College, Seattle, Washington



Figure 30. 1962 ASA Convention, Bethel College, St. Paul, Minnesota



Figure 31. 1966 Joint ASA/ETS Convention, North Park College, Chicago, Illinois



Figure 32. 1966 Joint ASA/ETS Convention, North Park College
 Left to right: Robert Fischer, E. James Kennedy, Robert Knudsen, Wayne U. Ault, H. Harold Hartzler.

Convention Topics 1946–1984

The subject categories of papers presented at the annual conventions of the American Scientific Affiliation (1946–1984) are graphed in Fig. 33 using the same categories applying to local section subject categories of Fig. 3. These data were gleaned from the convention programs. All programs but those for 1957, 1959, and 1977 were available. The graph of Fig. 33 is a plot of the raw data of Appendix 29. This graph reflects the

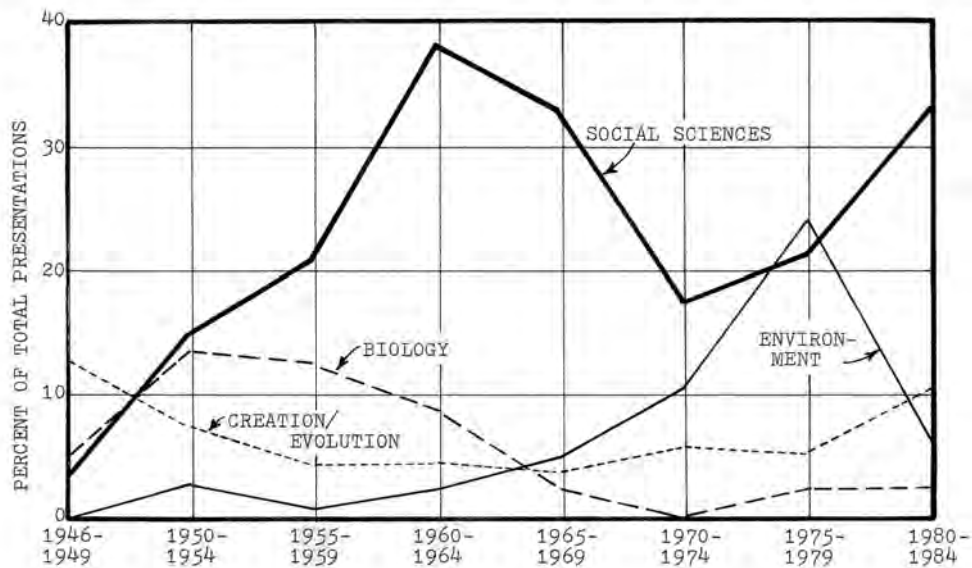


Figure 33. Subject Categories of ASA Annual Conventions

ebb and flow both of developments in science and popular interest. Since 1950, the social sciences have dominated convention papers with the exception of the 1975–1979 spurt of interest in environmental topics. The Creation/Evolution topic has had a steady, but minor, place in convention programs.

The Evangelical Theological Society

The Evangelical Theological Society (ETS) was organized in 1949. It was immediately recognized that ASA and ETS had many mutual interests. The theologian needs the guidance of the scientist, even as the scientist of evangelical persuasion needs the input of the theologian. In one sense the text of the original biblical documents can be likened to the observations of the physical world made by the scientist: they both need interpretation which is a human activity and thus subject to error. Specialists in the two areas can be of great value to each other through cooperative sharing of insights and checking on each other's methodology.

Leaders of the two groups got together in the early 1950s for the purpose of planning the first joint ASA/ETS conference. A permanent liaison committee was set up with three ASA and three ETS members with provision for replacing one on each side every two years. Six such conferences were carried out:

21–24 June 1955	Grace Theological Seminary Winona Lake, Indiana
9–12 June 1959	Trinity College and Seminary Chicago, Illinois
14–16 June 1961	Wheaton College Wheaton, Illinois
19–21 June 1963	Asbury College Wilmore, Kentucky
22–26 August 1966	North Park College Chicago, Illinois
16–28 June 1968	Jerusalem, Israel

Original plans called for such a joint conference every two years. The gap between 1955 and 1959 is unaccounted for, but that between 1963 and 1968 was filled with a joint conference with Intervarsity Christian Fellowship in 1965.

June was the preferred time for ETS members, but the last part of August has always been the preferred time for ASA conventions. A joint ASA/ETS conference usually meant two annual meetings for the ASA which placed a burden on ASA members. If the joint ASA/ETS conference were the only ASA conference of the year, it would have an unduly heavy theological emphasis which was not pleasing to all ASA members. It is probable that tensions such as these contributed to the abandonment of the joint ASA/ETS conference idea after 1968.

The first joint ASA/ETS conference resulted in a group of twelve papers published in the *Journal of the ASA* which may be considered a most significant early set of papers on science and theology.³ These papers discussed the principles upon which biblical and scientific investigations should be carried out.

Chapter 3

References

¹*Proceedings of the Third Annual Convention of the American Scientific Affiliation*, Calvin College, 1 September 1948, 70–88.

²Letter, F. Alton Everest to J. Laurence Kulp, 17 September 1948.

³*Journal of the American Scientific Affiliation* 7, no. 3 (September 1955).

Publications of the American Scientific Affiliation

Books and Monographs

Modern Science and Christian Faith

In the minutes of the meeting of the original five persons in Chicago in 1941, the first of ten possible tasks the new organization could undertake was, “The compilation and publication of material to strengthen the faith of students” (Appendix 1). This general statement soon came into focus as “The Students’ Handbook.” It was also known as “The Symposium” since, from the very first, it was envisioned as containing the contributions of specialists in the various scientific disciplines. It was always assumed that these authors would be drawn from the ranks of ASA members.

That first Executive Council felt woefully inadequate for any such writing task. For this particular project to get started would require a reservoir of talents of many members and for this reason energies were concentrated on building up the membership. The very early membership growth¹ was as follows:

Year End	Membership
1942	5
1943	32
1944	50
1945	62
1946	73
1947	81

The actual membership in 1947 was 73 instead of 81 as two had died and six had resigned.

In 1943, as a few new members of obvious ability began trickling in, thoughts of getting started on “the handbook” were encouraged. To publicize the project, the pamphlet, “Students’ Handbook Project of the American Scientific Affiliation” was printed and included in correspondence with membership prospects beginning in June 1943. The printing of this pamphlet was handled by Irving Cowperthwaite in the Boston area while Everest was on a three-month research trip in the Pacific. The content of this pamphlet is shown in Appendix 30.

It was decided that Everest should act as editor. As several papers (which were later rejected) had already been received, a much needed memorandum to authors was circulated 20 August 1943. By October 1943 the process was initiated of circulating mimeographed copies of proposed chapters to the entire membership with a request for critiques. Later an accumulation of these critiques was also circulated to the entire membership. As proposed papers were received, they and criticisms of them were circulated. As the project progressed, the bulk of material circulated increased exponentially, undoubtedly to the delight of postal and express authorities, but to the consternation of the editor with the demands of his wartime work.

A 1945 “Handbook Newsletter” stated:

Bringing the handbook reviews to a conclusion is taking longer than anticipated. Working entirely by mail means that things move slowly and the pace is not increased by overly optimistic time estimates by the editor. The publishing date will be about a year later than we had originally hoped, but the book should be ready for printing during the fall of this year.²

Realizing that the utilization of the book would be greatly affected by the publicity given it in the Christian press, copies of the proposed draft were, at that time, sent to the editors of ten Christian periodicals plus seven prominent Christian leaders. At the same time, reviewing procedures were set up for nine local section groups representing forty-nine of the sixty members at that time.

The 1945 publication date turned out to be another overly optimistic estimate of the editor. In a report to the membership dated 6 July 1948,³ it was stated (a) that the name, *Modern Science and Christian Faith*, had for the first time been adopted by the Executive Council, (b) that the page proofs were in the editor’s hands and books should be available for the convention in Grand Rapids early September, and (c) that the publisher

was Van Kampen Press of Wheaton, Illinois. It was reported that Wilbur Smith of Fuller Theological Seminary, a well-known bibliographer of Christian works, walked into Laurin Zorn's office at Van Kampen, pounded on his desk and said, "This is a book you *have* to publish."

After five years of learning the enormity of the philosophical problems encountered, it became evident that the enthusiasm and dedication of the early ASA members were fully matched by their inexperience. It must also be remembered that they were products of a less sophisticated early twentieth century era. Viewed in the light of today, *Modern Science and Christian Faith* is indeed quaint and inadequate, but we can rejoice in the principle that God uses flawed workmen to accomplish his eternal purposes and that even flawed work can be blessed of him.

As soon as the book was released in 1948, there arose a cry for a revised edition with improvements. Two chapters (mathematics and chemistry) were dropped and one (anthropology) was replaced for the second time by another and numerous improvements were made in chapters retained. Great improvements in style and smoothness were introduced by Miss Joan Wise, a textbook editor for McGraw-Hill, who volunteered her services following some gentle suggestions from J. Laurence Kulp. She worked directly with the publisher with great effectiveness. This second edition appeared 38 September 1950.

The first edition of *Modern Science and Christian Faith* had two printings, the first 3,000 copies, the second 2,000 copies. The attempt to obtain verification from the publisher of the number of copies printed of the second edition has been unsuccessful, but in one letter the following appears: "... the new edition might be as many as 10,000 in the first printing."⁴ Admittedly, this quantity appears high according to usual publishing procedures.

In 1955 the Executive Council accepted a proposal "to revise this book by chapters" and "to issue the chapters separately."⁵ In 1956 the Council "recommended individual chapters be written instead of a complete revision of the book."⁶ In 1957 the Council, after learning that Scripture Press (who took over from Van Kampen) did not want to let the book go out of print, "agreed to authorize a reprint and to begin work on revision."⁷ In 1962 "It was agreed that the Council should have a report from the Publication Board concerning the advisability of reprinting *Modern Science and Christian Faith*."⁸ There was a reluctance, it would seem, to let the poor book die and be given a decent burial.

Evolution and Christian Thought Today

In 1945 at a meeting of the Evangelical Scholar's Association, Carl F. H. Henry proposed that a "comprehensive, scholarly refutation of evolution be prepared to appear approximately on the hundredth anniversary of the publication of Darwin's *Origin of Species*."⁸ This became the topic of discussion at an afternoon and an evening ASA local section meeting held at Fuller Theological Seminary, Pasadena, California, 21 March 1948. Six ASA members and seven others, including Carl Henry and Bernard Ramm, were present. A six page outline prepared by Carl Henry was a part of this proposal which was sent out to the ASA membership on 14 April 1948 requesting comments, which were, in turn, duplicated and sent out on 14 July 1948.^{9, 10}

There was silence in Executive Council Minutes for the space of seven years. Finally, 19 February 1955, President Hartzler reported the appointment of a committee "to consider a proposed book in the general field of evolution to appear at the time of the centennial celebration of Darwin's work." This committee (composed of Everest, Mixter, Eggenberger, Monsma, and Knobloch) did one noteworthy thing, recommend the appointment of Russell L. Mixter as the editor of the proposed volume. His appointment was confirmed officially and he set about the laborious and time consuming task of coordinating the efforts of thirteen authors working on eleven chapters delineated in the reproduction of the "contents" page of the finished volume shown in Appendix 31. In spite of the desire for the book to be published prior to 1959, it did not appear until very late 1959.

The volume was selected by twenty-five book reviewers as one of the best books of the year (*Eternity Magazine*), and has had a healthful influence both within the ASA and the Christian public in general. Russell Mixter, in the Editor's Preface, states the posture of the authors in writing their chapters:

The reader may or may not agree with the conclusions urged by these authors. This is his privilege, and the respective authors ask only that their presentations be judged without prejudice. Each of them is committed to the evangelical Christian doctrine that the world and its living members are the result of the activity of God as declared in the Holy Scriptures. They do not hold that their views are the only possible ones, but they do maintain that the information they submit is accurate, and that their interpretations are fair to both Christian and scientific principles. These principles,

rather than any particular doctrine held by Christians of the past, have been their criteria of judgment.

The publisher, W. B. Eerdmann Publishing Co, of Grand Rapids, sold 1,000 sets of book pages to Paternoster Press of London for distribution under their own name. A review of *Evolution and Christian Thought Today* by Gordon E. Barnes appeared in the *Journal of the Victoria Institute*.

It is, undoubtedly, one of the better books dealing with this problem. The scientific facts and arguments are presented clearly, and theories assessed very fairly. Full authority is given to scriptural statements; and the attitude displayed by the authors is one of open humility. But despite all this, the book is very far from ideal.¹¹

Barnes then goes on to point out the flaws which apply to much of ASA work, not just this book. There is

confusion of the scientific and philosophical (or theological) categories of thoughts. For example, creation (a philosophical concept) and evolution (a scientific concept) are, throughout the book, regarded as antithetical ... This type of treatment is merely a temporary palliative: it does nothing to cure the intellectual malady which is the cause of science-religion controversies. What is needed is a dramatic rethinking, from first principles, to construct a Christian world embracing knowledge from both divine revelations, science and nature ... But, despite these criticisms, the book ought to be read by everyone concerned with the relation of modern thought to Christian faith.

Monographs

The idea of giving wider distribution to certain outstanding papers presented at conventions and/or published in the *Journal* found its expression in the concept of monographs.

The first monograph, "Christian Theism and the Empirical Sciences," was written by Cornelius Jaarsma, Professor of Education, Calvin College, Grand Rapids, Michigan. This paper was first presented as a guest paper at the second annual convention of the ASA at Taylor University, 28 August 1947 (Appendix 26-C). It was published in February 1950.

The second monograph was entitled "The Eye as an Optical Instrument." This was written by Frank Allen, Professor of Physics and Head of the Department of Physics, University of Manitoba, Winnipeg, Canada. This

paper was also presented (in absentia due to Prof. Allen's age) at the third annual convention of the ASA held at Calvin College, Grand Rapids, Michigan, also as an invited guest paper (Appendix 27-C). It was also published in the *Journal of the ASA* in volume 1, number 2 (1958): 9–28. The monograph appeared in print 14 February 1949.

The third monograph, "Creation and Evolution," had a quite different origin. Russell L. Mixter, Professor of Zoology, Wheaton College, Wheaton, Illinois, presented a series of three papers at annual conventions which were combined in this monograph. In 1946 his paper was "The Kinds of Genesis and the Kinds of Geology" (Appendix 25-C), in 1947 it was "The Extent of Change since the Origin of Species" (Appendix 26-C), and in 1948 his title was "The Mechanisms of Evolution" (Appendix 27-C). These were printed 8 February 1950 as the third monograph under the general title, "Creation and Evolution." Of the three monographs, this one had by far the greater distribution.

Mixter used it in his own course on evolution, and numerous Bible colleges and seminaries adopted it for classroom use.

There were plans for a fourth in the series on "The Age of the Earth" which never materialized.

Periodicals

Journal of the American Scientific Affiliation

How were the papers presented at the first annual convention of the ASA in 1946 to be shared with the scattered members? The decision was made to publish them in a "Yearbook." The word "publish" is here used as in "mimeograph." The first Yearbook, put together by the Secretary-Treasurer, Marion D. Barnes, contained a financial statement, vital statistics of new members, a list of members, and a bibliography of 304 books on science and religion by Librarian Thomas D. Parks. A summary of what happened at the convention was included as well as a list of registrants, an actual photograph of the group mounted on the page, and the text of the papers presented. It really was not a very impressive publication, but it served very well the immediate purpose of binding the scattered group together during this early postwar period. This Yearbook must be considered the forerunner of the *Journal of the American Scientific Affiliation*.

Another Yearbook was prepared in 1947 and mailed out to all members. It was patterned closely after the 1946 issue. There was no 1948 Yearbook; in its place was issued “A Symposium on the Age of the Earth.” The Los Angeles Section of the ASA had put together a six-paper meeting on the subject strictly for their own edification. Most of the six authors were completely outside their field; it was strictly a study project. When some interest was shown in publishing it, J. Laurence Kulp was asked to check the papers and to add one of his own.

The first issue of the *Journal* bears the date 7 January 1949, Volume 1, Number 1. A printed front cover (but no back) of heavier stock was stapled to the mimeographed interior. The disagreement between the cover, *Journal of the American Scientific Affiliation*, and the title page, *The American Scientific Affiliation Bulletin*, betokens the process of deciding on a name for the new publication. Numbers 2 and 3 carried this anomaly (there was no Number 4) but in Volume 2 the cover and title page agree. Volume 3 Number 4 (December 1951) was the last mimeographed issue.

Editorship

Marion D. Barnes, as Secretary-Treasurer, was the first editor of the Yearbook/Bulletin/Journal, even though his name does not appear on the masthead until the third issue, and then only at the prodding of the President. He carried this editorial task through 1948 on top of his duties as Secretary-Treasurer of the ASA as well as his regular employment. His term as editor ended with the last issue of 1951, at which time the *Journal* went to a printed format with Delbert N. Eggenberger as editor. The list of editors through the years follows:

1946–1951	Marion D. Barnes
1951–1961	Delbert N. Eggenberger
1962–1964	David O. Moberg
1964–1968	Russell L. Mixer
1969–1983	Richard H. Bube
1984–	Wilbur L. Bullock

Each of these has left an indelible stamp on the *Journal* as quality of content and makeup continued an upward trend. The dedication of these editors can only be measured by the years of their lives invested in the *Journal*. The ten years as editor served by Delbert Eggenberger and the fifteen years by Richard Bube are especially worthy of our attention. During Bube’s term as editor, the quality of papers and size of the *Journal* increased significantly.

Growth in Influence of the *Journal ASA*

Circulation of the *Journal* has grown from one hundred for the first Yearbook to 3600 in 1986 (2600 paid). It is available from University Microfilm, Incorporated, Ann Arbor, Michigan. Articles appearing in the *Journal ASA* are abstracted and indexed in the *Christian Periodical Index*, *Religious and Theological Abstracts*, and *Guide to Social Science and Religion in Periodical Literature*.

The *Journal of the American Scientific Affiliation* has enjoyed a growth in distribution and influence unmatched by any other in its field. Its high level of scholarship has been attained without sacrifice in doctrinal integrity. Those who equate their interpretation of scripture with ultimate truth do have problems with the *Journal* which holds to the general policy of the ASA, to serve as a forum in the search for truth on the interface between science and the Christian faith. It is admitted that not having a standard interpretation of scripture to propagandize appears to some as compromise.

Subject Categories in *Journal ASA*

It is of some interest to know how the *Journal* has covered various subjects and the relative shift of emphasis with time. Appendix 32 places each published paper in one of twenty-five categories. These are the same categories utilized in the study of local section topics (Appendix 23 and Fig. 3) and convention topics (Appendix 29 and Fig. 33). A graphical representation of the data in Appendix 32 is shown in Fig. 34. There are similarities and differences when compared to local section and convention topics. The growth of the interest in social science topics shows an understandable peak during the 1960s while a social scientist (David Moberg) was editor of the *Journal*. It is interesting that such a peak does not appear in local section topics until a decade or more later. One reason the social science category is so much higher than others is that it embraces many cultural factors such as substance abuse and segregation which were growing problems at that time.

The Creation-Evolution category hovers around the 10% level as it did in local section topics. At the conventions, however, it seems to be substantially lower. The peak at volumes 21–25 is due to the Bible Science Symposium papers published in volume 21.

The growth in papers published on environmental topics matches that of convention topics (to which it is closely related) but here again is a topic that fails to receive much attention at the local section level.

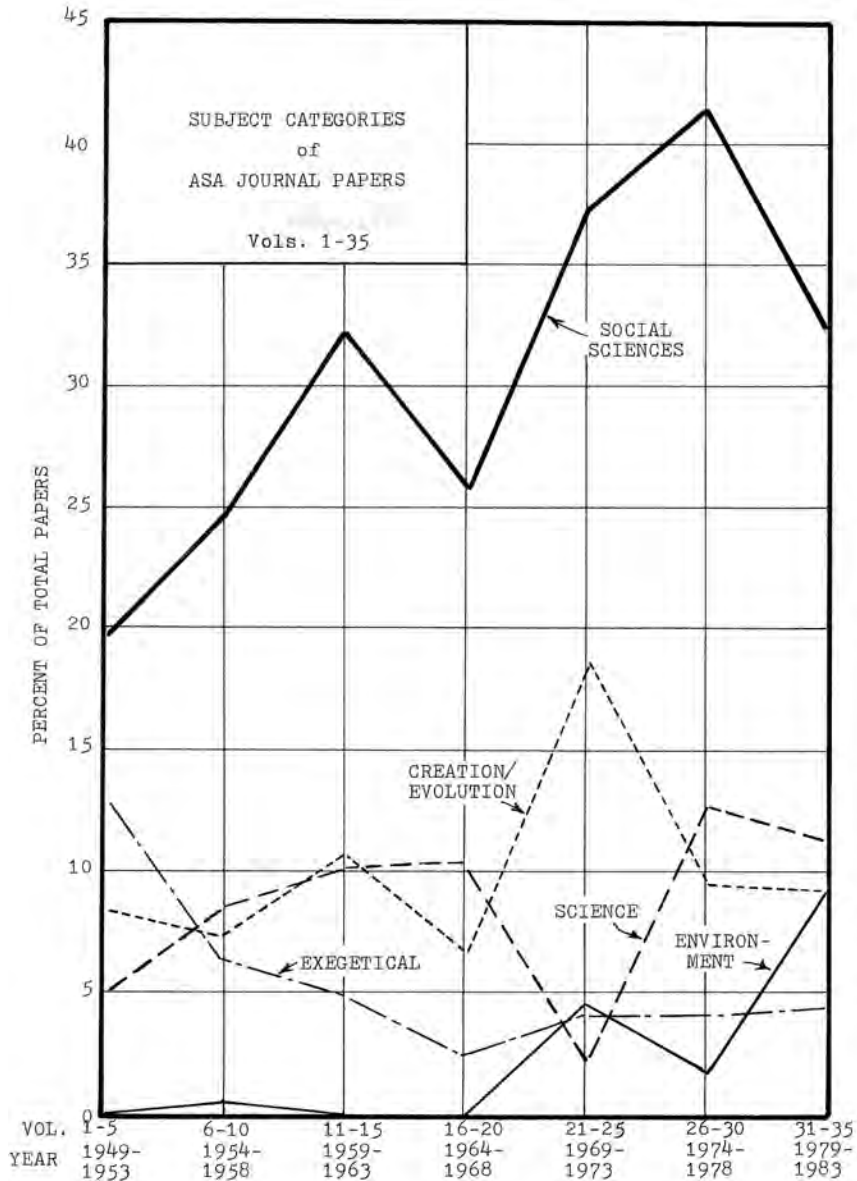


Figure 34. Subject Categories of ASA Journal Papers, Vols. 1-35

Book Reviews in *Journal ASA*

An extremely popular and effective feature of the *Journal* is book reviews. With the dramatic escalation of books published in related fields, such reviews make possible keeping up with what is taking place in intellectual and religious spheres. A slow growth in book reviews is noted in Fig. 35 prior to the 1960s, but a sudden upsurge in the number of reviews in the *Journal* coincides with Richard Bube assuming the editorship.

Editorial and Publication Boards

In 1960 the Executive Council decided to support their harried editors by appointing an Editorial Board upon whom they could call for assistance and formulation of policy. The editor of the *Journal*, Delbert N. Eggenberger was given the chair and the other members were Hendrik J. Oorthuys, John A. McIntyre, David O. Moberg, Robert F. DeHaan, Cordelia Erdman, and Lawrence H. Starkey.

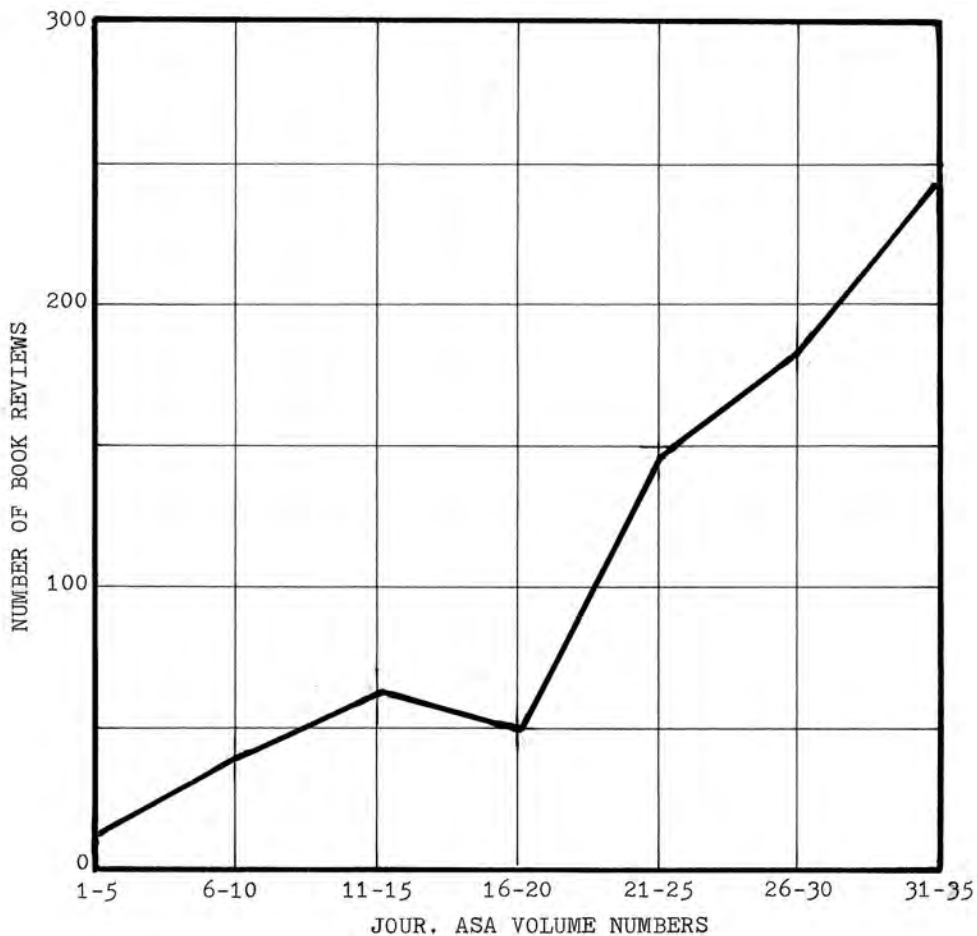


Figure 35. Book Reviews in the *Journal of the American Scientific Affiliation*

Later in 1960 the Executive Council appointed a Publications Board, not to be confused with the Editorial Board. This board had the task of establishing policy and procedures for publications other than the *Journal*, yet exclusive of the publicity and public relations fields. The personnel of this Board: R. L. Mixter, chair, R. P. Dilworth, I. Knobloch, C. T. Moore, K. Turekian, and G. D. Young.

The year 1960 appears to be pivotal in organizing and controlling policy for all ASA publications. The functioning of the Editorial and Publication Boards has served well into the 1980s.

American Scientific Affiliation News

The establishment of the so-called *News Letter* and the desire to build up local section activity are closely tied together. In 1958 Everest was appointed by President Hartzler to be the National Secretary for Local Sections.¹² His report to the Executive Council on this¹³ stressed the need for communication between local sections and between local sections and the membership at large. A newsletter was envisioned as a method of achieving such intercommunication. Consequently, Everest was appointed as the editor of a newsletter.¹⁴ The publication interval was left to him and the newsletter was to cover personal items as well as section news. “The proposed news letter is not intended to duplicate the purposes of the Journal in any sense, but is intended to provide an additional means of communication.”¹²

The first issue of *The American Scientific Affiliation News* appeared 13 February 1959. Through 1962 there were six issues per year which then dropped to five issues per year through 1969 at which time Everest retired as editor and Walter R. Hearn took over. Hearn managed to restore the six issues per year except for slipping back to five for 1973 and 1978. The old standard ASA mimeograph method was used through 1975 after which it was printed.

The *ASA News* has been immensely successful. ASA members are able to keep up with official business of the Council, news of conventions and section meetings, and personal news items chronicling the employment movements of members, academic advancements, etc. A very helpful feature has been the “Positions Looking For People” and the “People Looking For Positions” inaugurated by Walter Hearn. It has succeeded in encouraging local section activity. Whimsy is an important characteristic of *ASA News* and Editor Hearn is a past master at handling it.

Miscellaneous Publications

“Ten Prominent Scientists Look at Life”

The idea of the American Scientific Affiliation producing and distributing tracts seems a bit unusual if not outright unseemly. Yet, in the very early days of the ASA, members of the Executive Council were impressed with

a series of tracts with titles such as “Fourteen Prominent Citizens Look at Life,” “Fourteen Prominent Professional Men Look at Life,” and others. A plan soon took shape for the ASA to produce one, “Fourteen Prominent Scientists Look at Life.”

The appointment of Alfred C. Eckert to assemble a series of testimonies from scientists for such a tract was made in 1948.¹⁵ It was almost three years later that Eckert’s letter to the membership asking for suggestions of names of those who might qualify for inclusion went out. Good News Publishing Company, publishers of the other tracts, agreed to cooperate if acceptable text were received. “Ten Prominent Scientists Look at Life” was not published until 1956, the reduction from fourteen to ten being an economic consideration.

Those included in the tract were as follows: George K. Schweitzer (Nuclear Chemist), Walter R. Hearn (Biochemist), Russell L. Mixer (Zoologist), W. L. Starkey and Brian P. Sutherland (Engineers), Robert B. Fischer (Chemist), John R. Brobeck (Physiologist), Stanley W. Olson (Medical School Dean), Edward J. Matson (Research Scientist), and Kenneth L. Pike (Linguist). All but Brobeck, Olson, and Pike were ASA members at the time.

Early Promotional Booklet

In June of 1942 the promotional booklet entitled simply, “The Story of the American Scientific Affiliation,” was available for distribution in promoting the newly founded organization. The copy for this book was written by Everest and passed around the group of five founders for comments. Will H. Houghton, President of Moody Bible Institute, received the copy and passed it on to the Promotion Department of the Institute for production. It is most probable that, like the expenses of the five founders who gathered in Chicago, the cost of artwork, makeup, and printing of this booklet was borne by Henry Parsons Crowell. This very attractive booklet made a significant contribution in interesting prospective members.

Chapter 4

References

¹*The Message of the Secretary-Treasurer, Yearbook of the American Scientific Affiliation, 1947.*

²*Handbook Newsletter, to all ASA members, 8 June 1945.*

- ³*Symposium Progress Report*, 6 July 1948.
- ⁴Letter, F. Alton Everest to Frank Allen, 1 May 1949.
- ⁵Minutes of the ASA Executive Council, 24, 25 August 1955.
- ⁶Minutes of the ASA Executive Council, 24 November 1956.
- ⁷Minutes of the ASA Executive Council, 3 March 1957.
- ⁸Minutes of the ASA Executive Council, 12 May 1962.
- ⁹*Evolution—The First Hundred Years, A Proposal*, undated, but sent to ASA membership April 1948.
- ¹⁰Communication to Members of the ASA, 5 pages, 14 July 1948.
- ¹¹Book Review, *Evolution and Christian Thought Today*, edited by Russell L. Mixter, The Paternoster Press, 1959, reviewed by Gordon E. Barnes, *Journal of the Victoria Institute* 92, no. 2 (Winter 1961): 112, 113
- ¹²H. H. Hartzler, Letter to ASA Members, 14 March 1959.
- ¹³F. A. Everest, *Report on Local Sections*, 26 August 1958.
- ¹⁴missing.
- ¹⁵missing.

Reviewing Function of the ASA

The idea of reviewing books, papers, and articles is prominent in the early concept of what the American Scientific Affiliation was to do to justify its existence. Item 3 of the minutes of the organizing group meeting in 1941 (Appendix 1) states that one of the problems the envisioned group could work on was “The reviewing of written material to eliminate scientific errors.” This was one of the first activities of the early group. Separated geographically as they were, the mails were the medium of exchange of ideas.

Reviews of Internal Material

Papers written with the hope of being included in the forthcoming “Students’ Handbook” (later named *Modern Science and Christian Faith*) were circulated for reading and criticism. The ideal of obtaining critiques from those in the same scientific field as the topic of the paper was not always possible but as the membership grew this ideal was more closely approximated. The effort expended in reviewing papers intended for this book far exceeded that of any other project during the first decades.

Russell Mixer also used the review method of refining papers submitted for inclusion in *Evolution and Christian Thought Today*.

Peer review of papers considered for the *Journal of the American Scientific Affiliation* was exercised from the early days but was developed into a highly efficient and effective tool during Richard Bube’s tenure as editor.

Solicited Reviews from Outside the ASA

As word of the ASA “leaked out,” requests were received for guidance in regard to manuscripts. Editors of several magazines and publishing houses wanted help in evaluating scientific material received. “The President reported that some members of the ASA have reviewed literature for *Moody Monthly* and Van Kampen Press. In both instances the papers were not accepted for publication as a result of the review.”¹ Such rejections were on the basis of scientific inaccuracies, not at all on a conflict of views.

Unsolicited Reviews of Outside Material

Peter Stoner's background in mathematics caused him to be incensed at a book on Bible numerics he encountered. It was a popularization of Canadian Ivan Panin's work entitled "Astounding New Discoveries" written by Karl G. Sabiers. Stoner was able to confer with both Sabiers and his financial backer, chemist Albert Nobell in the Los Angeles area.

Panin's work claimed to prove the Bible inspired by assigning conventionally accepted numeric values to the letters in the original languages, then demonstrating inspiration by an exceptional number of additive combinations divisible by 7. Each such number was called a "feature." Many combinations were considered: the number of words in a passage, number of letters in a word, the value of each individual letter in a word, etc. The number of features Panin found were far below the number that should exist if taken at random. Panin had not considered the random requirement.

Stoner's careful dealing with Sabiers and Nobell^{2,3} undoubtedly contributed to Sabiers' work fading from the scene. Who can forget Stoner telling, with a twinkle in his eye, that by Panin's calculations he had computed that "The Prologue to Evangeline" is more inspired than Genesis!

Another example of ASA reviewing energies being directed toward outside works without outside solicitation had to do with books written by Harry Rimmer. Some members had complained of scientific errors in these very popular books. *The Theory of Evolution and the Facts of Science*⁴ was the one that received the most attention from ASA members because of question on the "facts of science" part, not the general thrust of the book. One ASA member's critique was 32 pages long causing Secretary-Treasurer Barnes to say: "I am becoming concerned by the length and number of critiques regarding Mr. Harry Rimmer's books."⁵ The critiques circulated among the members were labeled "confidential" because there was genuine concern that the ASA "might become known in the eyes of the Christian world only as an anti-Rimmer club."⁵ These critiques were never made public. The ASA was a fledgling organization and the officers were reluctant to launch it on a negative note. It was also noted that "Rimmer isn't writing and speaking on these subjects now ... and the man is a fine preacher."⁶ Rimmer died in 1952.

Film Reviews

The production of "Sermons From Science" films by Moody Institute of Science provided another opportunity of exercising the reviewing function

of the American Scientific Affiliation. Both Everest and Irwin Moon of the Moody Institute of Science had a deep interest in both MIS and ASA. It was never completely clear which organization profited the most by appearance of an ASA approval in the titles of the MIS films. Did it give viewers of the films greater confidence in their scientific accuracy? Or was the publicity the ASA garnered by having their name before millions of viewers around the world of greater worth? Undoubtedly it was a combination of the two.

There were always problems in film review. With the production work stretching over several years, there is nothing to review until it is finished. At that time there is tremendous pressure for the film to be released. It was also very expensive to redo the main titles with "Approved by the American Scientific Affiliation" on them if approval were denied. A reasonable working procedure was developed in which the film review committee was supplied with tentative scripts as the film story came together. By this procedure, the actual viewing of the film usually led to a routine favorable recommendation to the Executive Committee of the ASA.

The first film to be reviewed was "Voice of the Deep" approved by the Executive Council 1 September 1948. "Time and Eternity" received approval in 1955. "Windows of the Soul" was reviewed in 1960 and "Professor and the Prophets" in 1961. "City of the Bees" was approved in 1962. The personnel of the Film Review Committee varied greatly from time to time and outside specialists were often called in to provide expertise on certain subjects. The one constant of this committee was Robert P. Dilworth, the chairman; he was free to choose local reviewers conversant with the subject of the film.

Meaning of "Approval"

The phrase "Approved by the American Scientific Affiliation" has appeared in relatively few places and, perhaps in the future, it should appear in even fewer. It appeared on certain later editions of John R. Howitt's *Evolution* booklet published by International Christian Crusade. It has appeared on several Moody Institute of Science films. In many discussions within the ASA, it was agreed that such approval means only that the content is scientifically accurate, not that the ASA approves statements or conclusions of the author. The problem is that this limitation has not always been explicitly stated and that others may read more into it than the ASA would like. "Reviewed by the American Scientific Affiliation" was the form used in later films.

Chapter 5

References

- ¹Minutes of the Annual Business Meeting of the ASA, Grand Rapids, 1 September 1948.
- ²Letter, Peter W. Stoner to H. Harold Hartzler, 7 June 1947.
- ³Stoner, Peter W., "Dr. Ivan Panin's Work on Bible Numerics," *Yearbook of the American Scientific Affiliation*, 1947.
- ⁴Rimmer, Harry, *The Science of Evolution and the Facts of Science*, Wm. B. Eerdmans, Grand Rapids, 1939.
- ⁵Letter, Marion D. Barnes to F. Alton Everest, 19 February 1949.
- ⁶Letter, F. Alton Everest to Marion D. Barnes, 6 March 1949.
- ⁷Letter, F. Alton Everest to H. Harold Hartzler, 8 May 1970.

What Is the “Position” of the ASA?

In 1981 Executive Director Herrmann received a letter which contained this gem:

As I sat listening to the ... presentations, the panelists, and especially comments from members of the audience—I thought, “This wheel has been going around for forty years? When is it going to stop?”

The writer, a well-qualified university professor, a geologist, is strongly in favor of eliminating the neutral stance of the ASA on the subject of evolution in favor of a “positive” one.

Neutrality on controversial aspects of the science/faith interface has been the position of the ASA since its founding. This position, or lack of a position, has been maintained in spite of great pressure, both from members within the organization and from those outside. Hundreds of members have been lost and other hundreds of potential members have been repelled by adherence to this policy. On the other hand, those favoring neutrality would be lost or repelled should the policy be changed. The cost has been high, but the years have served only to underline the wisdom of this approach.

The ASA was conceived as a forum concerned with the search for truth and not as a society dedicated to the spreading of certain scriptural or scientific interpretations. The first constitution (May 1942) states as one of its purposes: “To promote and encourage the study of the relationship between the facts of science and the Holy Scriptures.” A better statement of the same idea is one of the objectives of the May 1970 constitution, “To investigate any area relating Christian faith and science.”

As Claude Stipe assumed the Presidency of the ASA in 1976, he made a study to determine whether the ASA had consistently maintained a neutrality through the years and really encouraged the forum approach to controversial questions. The results of his investigation are published in the *Journal*.¹ He acknowledges critical attitudes within the group

The old ASA is gone ... Back in 1946 we were all biblical and no one dared champion evolution.

If the ASA had remained true to the doctrines and principles on which it was founded, the Creation Research Society would never have been necessary.

We remember the days when the ASA was first organized. We were all against evolution then.²

Not in a spirit of criticism, but in an analytical way, Frank Cassell said:

Thus in 15 years we have seen develop within the ASA a spectrum of belief in evolution that would have shocked all of us at the inception of our organization.³

Change has taken place within the ASA with respect to the views of individuals, none can deny, but does this mean that the policy of the organization has changed? Not at all. From the very first “a spectrum of views” was considered the norm and desirable. In 1949 Mixter, as Secretary, shared his views on an applicant for ASA membership as follows:

I disagree with his adherence to flood geology and feel that his treatment of genetics was inadequate; however, you will note that he has ample scientific qualifications and content, and his orthodoxy is apparent from his affiliations. I feel it will be a value to us to have someone of his caliber who can serve as a brake on our enthusiasm.⁴

The value of a spectrum of views within the ASA is that those at one end of the spectrum can act as a check on those at the other end. This requires the exercise of tact, restraint, and tolerance, but these are all Christian virtues which should not be too difficult to call up on occasion.

There can be little doubt that there have been shifts in the center of gravity of the spectrum among ASA members through the years. In the early days of the ASA, the evolution/creation problem maintained a high profile. Many present day members have little interest in the evolution/faith controversy; their specialities may be in the social sciences or their interests in the responsibility of the Christian in environmental problems. Shifts in this spectrum of interests are clearly shown in the subject categories of local section meetings, Fig. 3; of annual conventions, Fig. 33; and of *Journal* papers, Fig. 34.

The *Journal* contains many early statements that support the contention that ASA policy of neutrality in things controversial has been consistently maintained since the organization was established. Marion Barnes stated as editorial policy in 1950:

To permit, within the framework of conservative theology, a discussion of both sides of scientific questions on which many true Christians are known to differ.⁵

In a 1951 paper, Everest quotes Allan A. MacRae (member of the Executive Council and past Vice-President):

To my mind it would be unfortunate for the Affiliation to go on record strongly in favor of any one of the various views. It seems to me that its purpose should be rather to show that the Bible, as correctly and carefully interpreted, and without any twisting whatever, leaves room for every scientific fact at present known, and does not contradict any scientific fact as yet discovered, however much it may be at variance with some theory built upon these facts.⁶

In 1952 the editor of the *Journal*, Delbert Eggenberger, responded to the perennial question within the ASA. “Should the ASA have a united front on controversial issues?” His reply is:

It has been the feeling of the Executive Council that this is not a proper aim of the ASA, rather we should attempt to present possible solutions on topics of interest to our group. We do not claim as a scientific organization to have the final answer on any given subject in the area of science and certainly we are not given to just one interpretation of biblical statements.⁷

Eggenberger enlarges on this view in a later editorial:

It would be easy to establish a “party line” in accepted scientific theory and in theology to which any accepted paper must adhere ... The editor, however, believes that the ASA has a purpose, and can thus best fulfill a needed function, of open-minded study that precludes such restrictions.⁸

It would be inaccurate to imply that the true forum approach was thoroughly worked out and clearly formulated in the minds of all ASA members of the early days. Marion Barnes, a member of the Executive Council and Secretary-Treasurer in 1944 when he expressed his views this way:

I feel that we can perform a real service if, with constant effort and open mind we do a bit of research, most of the library variety, and come to an agreement on a scholarly interpretation of the Genesis accounts. I see no need, however, for setting up a creed of creation ... we might eliminate some of the present conflicting interpretations, and

subsequently give a scientific support to that interpretation which seems correct to us.⁹

The Victoria Institute was established in England in 1865 with a policy similar to that of the American Scientific Affiliation:

The Victoria Institute is an avowedly Christian society even if it is at the same time an investigating body. The fact that a philosophical society with a Christian basis should devote itself so unrestrictedly to investigation in every realm of human interest reflects the sturdy faith of its founders that all truth must be one, and also their complete freedom from obscurantism—from any anxiety lest their investigations might lead to the discovery of inconvenient or unpalatable facts.¹⁰

It is inevitable that, to outsiders, confusion between society policy and the views of individual members will always be with us. Because of the catholic nature of its interests and its policy of neutrality in controversial matters, the ASA is also destined to be criticized by those of more parochial interests and narrow interpretations. Such confusion and misinterpretation of motives is an ongoing price which must be paid for continuation of the neutrality policy in years to come.

Chapter 6

References

- ¹Stipe, Claude E., “Does the ASA Take a ‘Position’ on Controversial Issues?” *Journal of the American Scientific Affiliation* 29, no. 1 (March 1977): 1–4.
- ²Marquart, Philip B., “Letter to the editor,” *Journal of the American Scientific Affiliation* 15, no. 3 (Sept 1963): 100.
- ³Cassel, J. Frank, “The Evolution of Evangelical Thinking on Evolution,” *Journal of the American Scientific Affiliation* 11, no. 4 (December 1959): 26.
- ⁴Mixter, Russell L., Letter to Members of the Executive Council, 15 March 1949.
- ⁵Barnes, Marion D., editorial, *Journal of the American Scientific Affiliation* 2, no. 4 (December 1950): i.
- ⁶Everest, F. Alton, “The American Scientific Affiliation—First Decade,” *Journal of the American Scientific Affiliation* 3, no. 3 (September 1951): 33.
- ⁷Eggenberger, Delbert N., editorial, *Journal of the American Scientific Affiliation* 4, no. 2 (June 1952): 1.

⁸Eggenberger, Delbert N., editorial, *Journal of the American Scientific Affiliation* 11, no. 4 (December 1959): 2.

⁹Barnes, Marion D., letter to F. Alton Everest, undated but placed May–June 1944.

¹⁰Bruce, F. F., “The Victoria Institute and the Bible,” *Journal of the American Scientific Affiliation* 13, no. 1 (March 1961): 11–14.

The ASA and the CRS

The open forum approach of the American Scientific Affiliation, with its tolerance for and encouragement of a wide spectrum of views, has nurtured a tidy number of literal creationists. Unchallenged expressions on such topics as a young earth, flood geology, etc., quite common in the early days of the ASA, were viewed more critically in later years by new members, specialists in various fields of science. Although this trend established a better balance of views within the ASA, many who held that their interpretation of Genesis 1–11 was the only tenable one felt that those holding other views were unfaithful to the Word and too quick in accepting the interpretations of modern scientists. This polarization within the ASA (actually a rejection of the open forum principle) percolated over the years and eventually resulted in the formation of the Creation Research Society.

In an entirely unintended and unwelcome way, the ASA became the “mother” of the CRS, nurturing the infant from conception to birth in 1963. Henry Morris, who must be considered the founding father of the CRS, joined the ASA in 1948, was advanced to Fellow in 1961, and did not resign until 1988, a total of 32 years. Duane Gish, another influential person in the CRS, joined the ASA in 1959, was selected as Fellow, and finally resigned in 1970. It is interesting to note that Morris remained a member seventeen years and Gish fifteen years *after* the CRS was established. This would seem to be strong evidence for the strength of the ASA’s open forum policy and tolerance toward Christian brothers and sisters who may have differing views of interpretation of scientific and theological matters.

Much of the impetus for the founding of the Creation Research Society in 1963 can undoubtedly be traced to the appearance of the Whitcomb and Morris book, *The Genesis Flood* in 1961.¹

The CRS was organized in 1963 around a “Team of Ten” which included:

- Henry H. Morris
- William J. Tinkle
- Frank Marsh
- John W. Klotz
- R. Laird Harris
- Edwin V. Monsma
- Walter E. Lammerts
- Duane T. Gish
- Walter H. Rusch
- John J. Grebe²

The first seven of this list were Fellows of the ASA in 1963 and the eighth, a member.

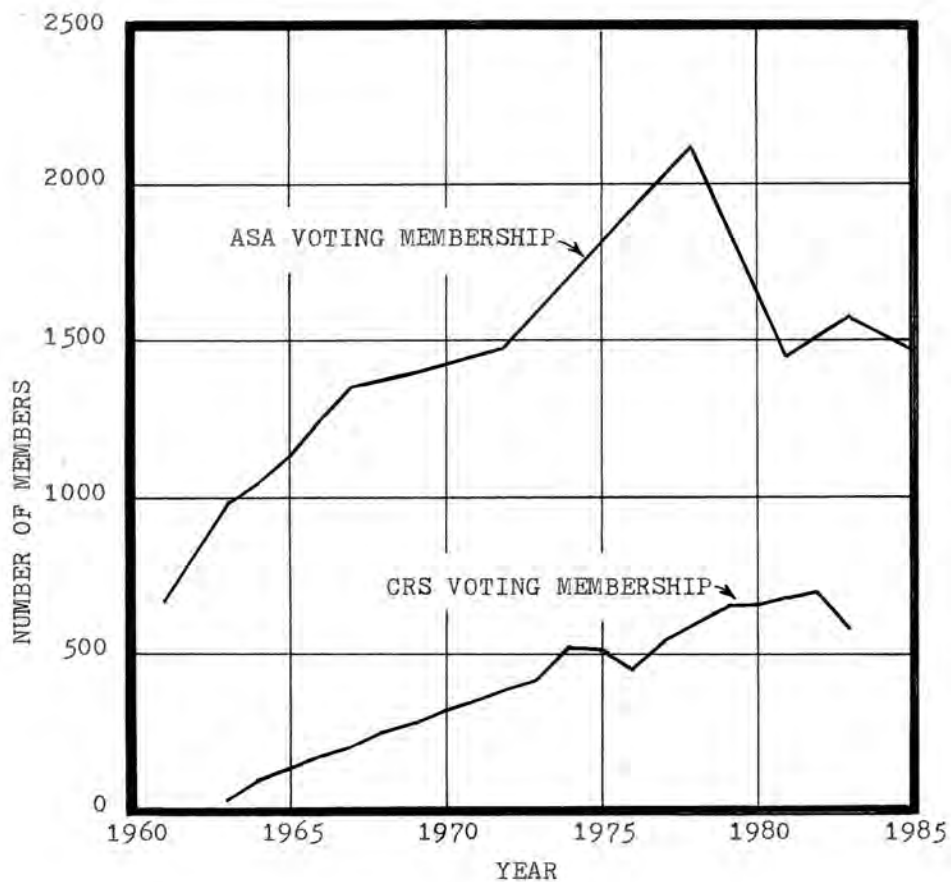


Figure 36. Voting Membership of the American Scientific Affiliation and Creation Research Society

The strategy, as outlined by Morris,³ was to attend the joint meeting of the ASA with the Evangelical Theological Society at Asbury College, Wilmore, Kentucky, 19 June 1963. The theme of this ASA/ETS convocation was “A Critical Synopsis of the Literature on Creation and Evolution.” Morris, Klotz, Harris, and Lammerts presented papers at this meeting and Tinkle presided at two of the sessions. After this they met at Grebe’s home in Midland, Michigan, where the actual organization of the CRS took place. The “Team of Ten” became the original board of directors. Only Klotz, a Fellow, is listed in the 1985–6 directory of the ASA. Monsma is deceased. In spite of the few who “hung on” for many years, there is no denying the fact that the ASA has lost talent to the CRS.

The ASA continued its growth in membership (see Fig. 1) as the CRS also grew. The question arises, “Did the ASA really suffer ‘a great exodus’ as some have implied?” Did the seven Fellows and one member of the ASA who became the original directors of the CRS precipitate a great number of resignations from the ASA? Has the growth of the CRS been primarily at the expense of the ASA? A comparison of the growth of voting membership of the ASA and the CRS is shown in Fig. 36. The CRS figures are Morris’ own.⁴ Let us see if answers to the above questions can be found.

A study has been made of resignations from the ASA for the years 1957 and 1972, fifteen years apart. The resignations in 1957 were well before the formation of the CRS, those in 1972 in the middle of the CRS growth curve of Fig. 36. The breakdown of the reasons for resigning from ASA follows:

Summary of Reasons for Resignation

	1957	1972
Shift of interest in other directions	38%	38%
Cannot afford	21%	8%
More liberal than ASA	7%	5%
More conservative than ASA	2%	14%
Misc. reasons and not stated	40%	46%
Total	100%	100%
Sample size	(43)	(153)

The “shift of interest” component has not changed materially in 15 years. The “more liberal than ASA” and the “misc. reasons” category have also changed little. The decrease from 21% to 8% would seem to indicate that

there was more money around in 1972 than there was 15 years earlier. The shift from 2% to 14% in the “more conservative” category is the more important item which would seem to indicate that some ASA members could very well have been attracted to the CRS.

This analysis would seem to indicate that a maximum of something like $14\% - 2\% = 12\%$ of resignations could conceivably be attributed to those going in the direction of the CRS. In 1972, 12% of the total number of resignations (153) amounts to 18 people. This is a maximum and it would be unreasonable to assume that all of these joined the CRS. The CRS had an increase in membership in 1972 of 50 over the year before. There seems to be evidence here that CRS growth is largely from the general public rather than the ASA. Some rather major factors were at work within the ASA affecting growth, such as advertising campaigns, which attracted many members during the 1975–1990 peak, many of whom fell away during the 1980–1985 slump in membership (see Fig. 1).

The evidence from this study of ASA resignations in 1957 and 1972 would indicate that, while some ASA members moved to CRS, the bulk of the CRS growth was from other sources.

Chapter 7

References

- ¹Whitcomb, John C., Jr. and Henry M. Morris, *The Genesis Flood* (Philadelphia: Presbyterian and Reformed Publishing Co., 1961).
- ²Morris, Henry M., *History of Modern Creationism* (San Diego: Master Book Publishers, 1984), 178–80.
- ³Ibid., 181–84.
- ⁴Ibid., 194.

The Canadian Scientific and Christian Affiliation

From the very early days of the ASA, many members lived in Canada. For example, the August 1946 directory lists Frank Allen (University of Manitoba), James Forrester (in Vancouver, on leave from Whitworth College), Brian P. Sutherland (Consolidated Mining & Smelting, Rossland, BC) as active ASA members. Frank Allen, one of the most illustrious of ASA members, was selected as the first Honorary Fellow in 1965. Brian Sutherland, present at the first ASA convention at Wheaton College in 1946, was elected to the Executive Council in 1952 and was Vice President 1953–1956. Canadians have had a strong hand in ASA affairs from early days and a significant number of ASA members have lived north of the border.

One ASA member suggested a Canadian organization in 1971 because the “American” in the ASA name was a problem. This elicited a vigorous response from Council members who insisted that “American” was continental, not political.¹ In the next minutes it was decided that the ASA annual conventions be called meetings in order that Canadians could claim tax deduction for attendance.²

In August of 1972, the 27th Annual Meeting of the ASA was held at York University on the outskirts of Toronto. This was the first ASA meeting on Canadian soil. About one-third of the registrants were from Canada. During the meeting, John F. Stewart of Ontario, laid before the Executive Council the desirability of incorporating a “Canadian Scientific Affiliation.” The Canadians did not want to split off from ASA, but they felt that under their laws they could increase membership and support for a Canadian entity. They would have a local address and they would purchase “services” and publications from the ASA. They would have tax deduction for contributions, dues, and expenses of attending meetings.^{3, 4} The Executive Council viewed the proposal with favor and assured their backing when the legal matters were straightened out. The ASA paid for the legal costs.

At a later time the Executive Council “voted that members of Canadian Scientific and Christian Affiliation have all the rights and privileges of ASA membership including voting, Fellow member status and Council membership.”⁵

In 1972 the expectation was that this move would encourage growth in the Canadian membership. Table I shows the growth in each province over the 13-year period 1972–1985.

**Table I. Growth of Membership
Canadian Scientific and Christian Affiliation, 1972–1985**

Province	Membership	
	1972	1985
Alberta	9	24
British Columbia	13	28
Manitoba	4	8
New Brunswick	1	2
Ontario	48	100
Quebec	5	8
Saskatchewan	1	2
Newfoundland	—	3
Nova Scotia	—	9
Totals	81	184

This represents a 127% growth during this 13-year period. We note a doubling of membership in most provinces and the start of CSCA activity in others. It is quite probable that incorporation in Canada stimulated much of this growth.

Table II shows that the distribution of members through the various classes follows the experience of the U.S. reasonably closely. The disparity in percentage of Member classification in 1972 seems to have equalized quite well by 1985. In short ASA members in Canada now called members of the CSCA, are distributed through the several membership grades about the same as members in the United States.

**Table II. Breakdown of Membership
Canadian Scientific and Christian Affiliation**

Membership status	Canada 1972	U.S. 1972
Fellows	7.4%	7.4%
Members	67.9%	78.7%
Associates	24.7%	13.5%
	100.0%	100.0%

	Canada 1985	U.S. 1985
Fellows	8.7%	9.2%
Members	58.7%	61.3%
Associates	22.3%	10.4%
Student	10.3%	19.1%

Chapter 8

References

¹Executive Council Minutes, 16 August 1971.

²Executive Council Minutes, 7 October 1971.

³Hearn, Walter R., ed., *American Scientific Affiliation NEWS* 14, no. 5 (October 1972): 2.

⁴Executive Council Minutes, 21–23 August 1972.

⁵Executive Council Minutes, 1–2 March 1974.

A “Recounting of the Acts of God” within the ASA

In the preface it is stated that the history of a Christian organization (quoting Ted Engstrom of World Vision) is simply a recounting of the acts of God as he has worked through that organization. Looking back over almost a half century of ASA history, many things come to mind. There are the highs of Christian fellowship, the thrills of new insights into scriptural passages, the frightening implications of scientific advances, and new vistas on the greatness of God and his creation. Mixed in are also depressing memories of tedious and specious argumentation over points far removed from the target subject. There are the tests to which the agape spirit is subjected when fellow members persist in riding their hobby horses. But when these memories are tenderized by the years, what dominates our view of the American Scientific Affiliation?

The Fellows

The overall membership of the ASA is undoubtedly its greatest asset. The hopes, aspirations, and convictions of the members make up the framework which shapes the ASA. An exceptionally significant segment of that membership is the group of Fellows in whose hands the future of the ASA rests. They are selected on the basis of both scientific and spiritual qualifications. This group is far more important in assuring the proper future course of the ASA than the most detailed doctrinal statement.

From the Fellows are drawn all Executive Council members and all officers of the ASA are Council members. Ultimately, all major decisions affecting the future of the ASA are in the hands of Fellows. True, it is an honor to be a Fellow, but this is tempered by the great responsibility involved. The Fellow group has been remarkably stable through the years. There have been a few resignations, most of them on principle, basic disagreement on which direction the ASA is going. A few have left because the ASA is too conservative, some because it is too liberal. The “hopes and fears of all the years” for the ASA are vested in this 10% of the ASA membership. These Fellows have been very special channels through whom the acts of God have flowed.

The Executive Council and Officers

Between the years 1941 and 1985, fifty persons have been elected to the Executive Council. Thirty-seven of these have served as President, Vice President, or Secretary-Treasurer. Many of these have served in all three positions because an informal rotation system has been in force for many years. The term of office of a Council member is five years, we are talking here of 250 person-years of faithful and intensive service. None of these have received any remuneration for the administration of the ASA in this capacity. Only in later years has there been any reimbursement for travel expenses in getting to the meetings, and in many cases the reimbursement is turned into a gift to the ASA. The smooth ongoing work of the ASA is directly attributable to this “faithful fifty.”

Although the ASA has had a scattering of women members since the very early years, some of whom have made significant contributions, they have undoubtedly been downtrodden by the prevailing chauvinistic attitudes of the males. No more. In 1984 Ann H. Hunt, a scientist at Eli Lilly Company, was elected to the Executive Council with all the rights, honors, and privileges thereunto appertaining. In 1986 she became President. Executive Council members, in a very special way, become the custodians of the acts of God.

Executive Secretaries/Directors

It may be an oversimplification, but one way of looking at the history of the ASA is to divide it into four epochs: (1) early, (2) Hartzler, (3) Sisterson, and (4) Herrmann.

The early period was characterized by growth from the original five to about 800 members, the establishment of the *Journal* and considerable busy-work associated with publication of *Modern Science and Christian Faith*. It was an important era, to be sure, because foundations were being laid for the structure to follow.

H. Harold Hartzler came aboard as Executive Secretary in 1961, on approximately a one hour per day basis, fitting the ASA work around his job as a professor at Mankato State College. He had been very active in the ASA prior to this, but with an office and secretarial help, he was able to accomplish much more. This was an extremely important 11-year period of growth. An examination of the membership graph in Fig. 1 will show that prior to 1961 the rate of increase in membership tended toward a plateau. Hartzler’s decade immediately following shows a marked accelerated growth rate.

Hartzler traveled extensively in the interests of the ASA. He was constantly involved in encouraging local section activity and seeking out new members. His diligence, faithfulness, and optimism set a challenging example for others. He maintained liaison with the Creation Research Society, constantly striving to bring the two groups together. Let it be said that Hartzler's contribution to the development of the ASA was a significant one.

In August of 1972, William D. Sisterson took over the job of Executive Secretary from Hartzler. He served for eight years in this capacity. These eight years are noted particularly for the orderly procedures instigated. Sisterson brought much needed organizational abilities to the office, and procedures were introduced which have since become routine. There was great growth in membership during Sisterson's time. This came largely as a result of extensive advertising in *Christianity Today* and *Eternity* magazines. This was a very expensive project, and it took several years to wipe out the deficit incurred. This negative aspect of this eight-year period should not blind us to the significant gains made in strengthening local sections and individual members and developing the integrity of the ASA.

A short interim period following Sisterson's resignation was covered by Harry Lubansky who maintained the essential flow of coherent activity. Robert L. Herrmann took over as Executive Director in 1981. The first five years of Herrmann's tenure have opened up a new and brighter future for the ASA with a vitality which springs both from a spiritual depth and scholarly qualifications. Moving with ease and grace in Christian as well as secular intellectual and scientific circles, Herrmann is "healing on wheels." He has been a good antidote for the "thinking small" outlook in both program and financial affairs which has dominated the ASA since its inception. He sees a great opportunity as a great challenge to share with those who might assist financially in bringing it to reality.

Thus each of the four epochs of the ASA has been a step upward in strengthening the ASA. Each epoch was dominated by the Executive Secretary/Director, each bringing his own unique and significant contribution to the ASA. In retrospect these stages can now be clearly seen as direct and specific acts of the Lord.

The Conventions

The forty conventions organized by the ASA through 1985 have served to provide a reservoir of papers for the journal, have given an opportunity for fellowship among members, and have been a display window of ASA

activities for visitors. The efforts of many people are required to put on a convention. Disregarding for the moment the happy look on people's faces in the convention photographs of Figs. 4 through 32, are these efforts worthwhile?

For the 10% or so of the membership able to attend conventions, the answer is yes, they are definitely worthwhile. Those reading the papers in the *Journal* a year or so later would probably also agree that they are worthwhile. For a significant proportion of ASA membership, the answer is noncommittal because they have never attended a convention.

There is a constant official effort to upgrade the quality and significance of papers presented at the conventions and to have invited speakers who can bring new and challenging insights. In addition to this, an international flavor has been introduced in 1965 and 1985 in having the venue of the conference at Oxford University. Acts of God have fallen on both individual and the ASA as a group as a result of the conventions.

The Local Sections

Local ASA section activities touch from 10 to 20 times the number of people attending the annual convention. However, they touch them in quite a different way so we cannot say they are 10 to 20 times as influential. The important thing about local section meetings is that ASA members get to meet other ASA members and that such contacts encourage all aspects of the program.

The Commissions

In 1960 four commissions were set up by the Executive Council to cover the fields of psychology, social science, natural science, and the history and philosophy of science. A chairman and personnel were designated for each commission. The chief responsibility of a commission is to keep a close eye on developments within that scientific discipline and to communicate pertinent information to the rest of the membership through the *Journal*, convention papers, etc. At one time, the charge to each commission was to write a book on the implications of that field of science. Preparing programs for annual conventions was another duty, on assignment. The annual conventions of 1961, 1962, 1963, 1964, and 1965 were each the responsibility of one of these commissions.

In 1965 the number of commissions was increased to five by replacing natural science with biological science and physical science, retaining the other three. During this period of activity, the problems of making the commission plan work became apparent. Difficulty of members of

a commission getting together because of geographical separation added to the time-honored problems of lethargy and inertia. A survey by Gary Collins resulted in his recommending to the Executive Council that all commissions be abolished and that “task forces” be appointed to deal with specific topics and projects and, after submitting an annual report, be disbanded.

After a few years of “in between” type of activity, Herrmann, in 1983, suggested setting up 12 commissions or committees or task forces, whatever the name, to cover the following areas of interest to the ASA:

Biomedical Ethics	Origins
Social Ethics	Evangelism
Church Relations	Environmental Ethics
Missions	Scholarship
Publications	Long Range Planning
Membership	Industrial Engineering Ethics

In this way the original commission plan is broadened to channel the acts of God to the membership and the world.

Get-Togethers at Scientific Meetings

In stressing excellence in its members, the ASA has always encouraged attendance at scientific conferences. A natural result of this is the desire of those members attending to get together. The Federation of Christian Fellowship was started by Walter Hearn and Kurt Weiss to gather ASA members and other Christians attending conferences of the Federation of American Societies for Experimental Biology. A typical get-together might be a breakfast or a dinner with a talk to stimulate discussion. Such meetings are listed in the official program. Fellowship gatherings of this type are also organized for conferences of the American Chemical Society and other scientific societies. Activities of this type encourage the individual in witness and Christian living in secular scientific situations so that the acts of God can flow to others.

The *Journal of the ASA*

The *Journal of the American Scientific Affiliation* has gone through a metamorphosis since its establishment in the mid-1940s. There was usually a dearth of material in those early days but in spite of this it served well in the spread of information and ideas and in binding ASA members together. Although it was quite unprofessional in appearance and (to some) impact,

the foundation laid was solid. Each successive editor made an important contribution to this metamorphosis of the *Journal*. Richard Bube's contribution was pivotal: combining erudition, intellectual strength, and controversy. The controversy was the direct result of applying the open forum principle. Both sides of questions were treated with a forthrightness which, perhaps, had not characterized the ASA previously. Refusing to lower the standards of the *Journal* and working constantly toward its greater credibility, Bube was the recipient of much "flak." In spite of the "high noise level," he meted out space equitably, treated opposing views with fairness, while always insisting on integrity of approach, consistency, and brevity. Like each successive editor before him, Wilbur Bullock, in 1984, took over editorship of a *Journal* considerably improved over the preceding one. The acts of God continue to flow.

The ASA News

From a flimsy attempt to encourage the formation and conduct of local section meetings the *ASA News* under Walter Hearn has grown into one of the strongest fibers holding ASA members together. This is true in both the inspirational and scientific sense. Each issue is a thrilling chronicle of the amazing things ASA members are doing, both in their scientific accomplishments and in novel forms of Christian service and witness. The *News* dramatizes the unique role that Christians trained in science can play. The *News* is a medium of communicating the acts of God taking place in the ASA to the membership at large.

Publications

In addition to the *Journal of the ASA* and the newsletter, there has been a continuing series of books, monographs, reprint series, conference proceedings, etc. which have been published by the American Scientific Affiliation. These might be called direct publications. Another important source of publications might be called peripheral in that ASA members are the authors. The books by David Moberg in the social sciences, by Gary Collins in the field of psychology, and the books growing out of the Oxford Conferences are examples which come to mind. This latter peripheral category may be every bit as influential as the direct publications. But whether direct or peripheral they are influencing people and encouraging healthful views of biblical and scientific interpretation and constitute another stream of the acts of God.

Relationship

The appearance of the American Scientific Affiliation on the scene seemed to precipitate the appearance of Christian organizations in other fields of

study. Perhaps not all, but at least some of the following may have been encouraged to organize after seeing what was happening in the ASA:

Christian Association for Psychological Studies

Christian Legal Society

Christian Medical Society

Evangelical Theological Society

Institute for Advanced Christian Studies

Institute for Christian Studies

Numerous conferences have been jointly sponsored by the ASA and one or more of the above. The Evangelical Theological Society and the ASA have held at least half a dozen conferences together. There is mutual encouragement in such cooperative efforts as well as a broadening of interests and stimulation of vision for creative forms of Christian service and witness. We join hands with others that the acts of God may take form.

The California Textbook Controversy

Should Christians dabble in political and social problems? The California textbook controversy provided an opportunity for service and witness that several ASA members could not turn down, although the ASA was not officially involved. The controversy centered on what to specify about evolution and origins in an official framework for science teaching in California public schools. Pressure was being applied by those having diverse opinions on the subject. This was an important national issue, because California buys something like 10% of the textbooks sold in the U.S. and textbook publishers follow its every move.

Because of a fine statement he had made in a hearing, Vernon Grose (then an ASA Fellow, since resigned) was made a member of the Curriculum Development Commission. Two past Presidents of the ASA, Robert E. Fischer and Richard H. Bube were later added to the same commission and added their input.¹⁻⁵

President Jack McIntyre summarized the contributions of these ASA members as follows:

... the textbook controversy in California has brought to public attention again, those fundamental issues separating Christians from those presenting a materialistic view of the world. This controversy has been reported in *Science*, *The National Observer*, *The New Scientist* (a British magazine) as well as in Christian magazines. Furthermore, ASA members Vernon Grose, Richard Bube, and Robert

Fischer have participated as central figures in the drama and have maintained the Christian viewpoint in an effective and responsible manner. At this very time, the hard thinking and open interaction that the ASA has provided for its members through the years is yielding fruit in the most important confrontation between science and Christianity since the Scopes trial. There can be no doubt that the ASA is important to the Christian cause ...⁶

The influence of the ASA members was in the direction of helping to define the issue (see Appendix 33). They stressed the importance of careful identification of scientific speculation in material on origins for the elementary level. This is an example of the sort of thing going on within the ASA membership all the time, acts of God reaching out to others.

Chapter 9

References

¹Fischer, Robert B. and Richard H. Bube, "Evolution in Science Education," *JASA* 25, no. 2 (1973): 68–70.

²Bredesen, Harald, "Anatomy of a Confrontation—An Interview with Vernon L. Grose," *JASA* 23, no. 4 (1971): 146–9, a reprint from *Christian Life* (November 1970).

³Hearn, Walter R., ed., "ASA Member Plays Role in California Compromise," *ASA News* 11, no. 5 (Dec. 1969): 4.

⁴Hearn, Walter R., ed., "Covering the California Confrontation," *ASA News* 14, no. 6 (Dec. 1972): 5.

⁵Hearn, Walter R., ed., "News of the California Textbook Controversy," *ASA News* 15, no. 1 (Feb. 1973): 2.

⁶McIntyre, John A., "Letter to New Members, 10 April 1973," *ASA News* 15, no. 4 (August 1973): 16.

Minutes of a Meeting held at the Moody Bible Institute of Chicago September 2–5, 1941 for the Purpose of Organizing a Fellowship of Scientists who are Believing Christians and Zealous Expositors of God's Word.

The meeting was attended by

Prof. F. Alton Everest, Oregon State College, Corvallis, Oregon
Prof. Peter W. Stoner, Pasadena Jr. College, Pasadena, California
Prof. Russell D. Sturgis, Ursinus College, Collegeville, Pennsylvania
Prof. John P. VanHaitsma, Calvin College, Grand Rapids, Michigan
Dr. Irving A. Cowperthwaite, Thompson Wire Co., Boston, Massachusetts

This group gratefully acknowledges the extremely helpful cooperation of

Dr. Will H. Houghton, President, Moody Bible Institute of Chicago
Mr. H. Coleman Crowell, Moody Bible Institute of Chicago
Rev. Irwin A. Moon, Moody Bible Institute of Chicago

It was agreed at the first session of the group that there was a useful sphere of service for an organization of consecrated scientists. The following was drawn up as a partial list of problems upon which such a group could work.

1. The compilation and publication of material to strengthen the faith of students.
2. The distribution of material of scientific accuracy to ministers and Christian worker.
3. The reviewing of written material to eliminate scientific errors.
4. The establishment of a summer school for educators and Christian workers.
5. The establishment of a speakers bureau featuring scientists who would speak on biblical subjects.
6. The establishment of a correspondence school for the dissemination of scientific-biblical material
7. The canvassing of scientists for Christians in sympathy with the objectives of such an organization who would be interested in joining it.
8. The calling of an annual conference to which representatives of accredited religious schools would be invited to present for discussion and review the teachings of their schools which have scientific implications for the purpose of aiding them in working out all scientific errors.
9. The publication of a biblical-science newsletter to be sent regularly to subscribers.
10. The preparation of a reference manual.

A motion was made by Prof. Stoner that an organization be formed to incorporate the above objectives as suitably amended. This motion was seconded by Dr. Cowperthwaite. No vote was taken on the motion.

A suggested constitution for such an organization which had been prepared by Prof. Everest was read for consideration. The statement of creed was discussed at length.

The following qualifications for membership in the organization were determined upon.

1. Applicant must be one who loves the Lord.
2. He must have recognized competence in some branch of science.
3. One who is recommended by a member of the organization and is approved by the membership.
4. One who has shown evidence of zeal for promoting the study of the relationship between science and the Scripture.

The following men were suggested as likely candidates for membership in the organization. Each one is to be contacted in the interest of the organization by a member of the group.

Dr. Houghton agreed to be responsible for the following:

Dr. Svere Norborg, Prof. of Philosophy, University of Michigan
Prof. Frank Allen, Manitoba University, Winnipeg, Manitoba, Canada
Mr. Cyril Luckman, The King's College, Belmar, NJ
Dr. John Abernathy, 409 Robinson Blvd., El Paso, TX
Dr. Alexander Grigola, Wheaton College, Wheaton, IL
Dr. Howard Gray, Mayo Clinic, Rochester, MN

Prof. Stoner agreed to be responsible for the following:

Mr. Arthur Gehrig, Pasadena Jr. College, Pasadena, CA
Dr. Alter, Director of Griffith Planetarium, Los Angeles, CA
Mr. Lester Ready, Civil Engineering
Prof. Franklin Thomas, Cal. Tech., Pasadena, CA

Prof. Everest agreed to be responsible for the following:

Prof. E. C. Callaway, Oregon State College, Corvallis, OR
Prof. F. O. McMillan, Oregon State College, Corvallis, OR
Prof. Harold Cockerline, Oregon State College, Corvallis, OR
Mr. G. F. Waldo, Oregon State College, Corvallis, OR

Prof. VanHaitsma agreed to be responsible for the following:

Prof. S. L. Loewen, Sterling College, Sterling, KS
Prof. C. Evers, Central College, Pella, IA
Prof. E. A. Schoenknecht, Brevard College, Brevard, NC
Prof. A. S. Rudolph, Bethel College, MacKenzie, TN
Prof. T. Vergeer, Hope College, Holland, MI
Prof. Paul E. Parker, Marion College, Marion, IN
Dr. E. Y. Monsma, Calvin College, Grand Rapids, MI
Prof. Russell Mixter, Wheaton College, Wheaton, IL

Dr. Cowperthwaite agreed to be responsible for the following:

Prof. Edwin Gedney, Gordon College of Theology and Missions, Boston, MA
Prof. Carl Pearson, Simmons College, Boston, MA

It was decided to have each member of the present committee responsible for investigating and recruiting suitable members from their geographical areas.

Prof. Everest – Pacific Northwest
Prof. Stoner – Pacific Southwest
Prof. VanHaitsma – Central States
Prof. Sturgis – Middle Atlantic States
Dr. Cowperthwaite – New England States

The following names were suggested and debated for the proposed organization.

Bible and Science Investigation Society (BASIS)
Bible and Science
Bible and Science Interpretation Society
Scientific Christian Fellowship
National (or American) Association for the Correlation of Science and the Bible
Society for the Investigation of Correlations between Science and the Bible
Society for the Study of the Relations between Science and the Bible
Association of Christian Scientific Men
Society of Christian Scientific Men for Biblical Research
Society of Scientific Christians for Biblical Study
Scientific Society for Biblical Study
Scientific Society for Biblical Interpretation
American Scientific Affiliation
American Affiliation of Sciences
National Affiliation of Scientists

The following were determined upon as fundamental needs to be met by this organization.

1. Review of material. Members acting in the name of the organization would review manuscripts, books, pamphlets, oral presentations, seminary courses, etc.
2. Preparation of material. Members working in the name of the organization will prepare and present original papers and collaborate in the preparation of a handbook to guide students.
3. Dissemination of material. The organization will cooperate in the publication of contributions of members, and will maintain a speakers bureau.

It was suggested to Dr. Houghton that as a first step in the program of collaboration between the group and Bible Institutes, that the faculty of Moody Bible Institute meet with the organization

Appendix 1

next year. Dr. Houghton expressed eagerness to cooperate in the manner. As the faculty have their vacation during the month of August and convene after Labor Day weekend, it was decided to hold the meeting next year the week following Labor Day.

A motion was made by Prof. Stoner that the matter of final selection of the name for the organization be left to Prof. Everest who will confer with Dr. Houghton and Mr. Moon. This motion was seconded by Dr. Cowperthwaite and was passed.

The meeting adjourned after electing Prof. Everest, Chairman, and Dr. Cowperthwaite, Secretary-Treasurer.

**The First Constitution
May 1942**

**THE CONSTITUTION
of
THE AMERICAN SCIENTIFIC AFFILIATION**

ARTICLE I—OBJECTS

The objects of the Affiliation shall be:

- (1) To integrate and organize the efforts of many individuals desiring to correlate the facts of science and the Holy Scriptures.
- (2) To promote and encourage the study of the relationship between the facts of science and the Holy Scriptures.
- (3) To promote the dissemination of the results of such studies.

ARTICLE II—STATEMENT

I believe the whole Bible as originally given to be the inspired work of God, the only unerring guide of faith and conduct. Since God is the Author of this Book, as well as the Creator and Sustainer of the physical world about us, I cannot conceive of discrepancies between statements in the Bible and the real facts of science. Accordingly, trusting in the Lord Jesus Christ, the Son of God, my Saviour, for strength, I pledge myself as a member of this organization to the furtherance of its task.

ARTICLE III—MEMBERSHIP

Section 1. Only those persons shall be eligible to membership in the Affiliation: (1) who subscribe to the Statement of Article II; and (2) who have shown noteworthy achievement in original investigations in some branch of pure or applied science, or who by training and-or experience in scientific or biblical fields are qualified to further its aims.

Section 2. Upon the written recommendation of a member of the American Scientific Affiliation, a person may be elected to membership by a vote of the Executive Council.

ARTICLE IV—OFFICERS

Section 1. The affairs of the Affiliation shall be guided by an Executive Council of five members.

Section 2. The members of the Executive Council shall be elected for a term of five years, one member to retire each year, except in special cases, such as starting the rotation and filling unexpired terms.

Section 3. The officers of the Affiliation shall be elected by the Executive Council from its own ranks and shall consist of a president, a vice-president, and a secretary-treasurer. The term of office shall be one year. The President so elected shall be ex-officio chairman of the Council.

Section 4. Every reasonable effort shall be made, consistent with leadership ability, to select council members from the different fields of science as well as geographical areas.

ARTICLE V—MEETINGS

Section 1. The Affiliation shall hold an annual meeting at the time and place designated by the Executive Council. Other meetings may be authorized by the Executive Council.

Section 2. At this annual meeting the membership convened shall fill all vacancies on the Executive Council.

Section 3. The Executive Council shall hold at least one meeting during the year.

ARTICLE VI—PUBLICATIONS

Section 1. At the discretion of the Executive Council, the Affiliation shall publish such brochures as may appear desirable. The Executive Council shall have full power to enter into contract and agreement with publishing agencies in the name of the Affiliation.

Section 2. The Executive Council may review manuscripts prepared by persons outside the membership of the Affiliation, and authorize the use of the name of the Affiliation and the stamp of approval on manuscripts which are judged to be worthy from the standpoint of content and style. The Executive Council shall encourage writers before publishing their works, to avail themselves of this critical review by experts in the field.

ARTICLE VII—FUNDS

Section 1. The Executive Council shall fix the dues for members.

Section 2. The Executive Council shall receive bequests and gifts in the name of the Affiliation.

Section 3. The Executive Council shall expend its funds in accordance with the objects of the Affiliation.

Section 4. The activities of the Affiliation shall not be carried on for the purpose of deriving a profit. Should any profit result from the activities of the Affiliation, it shall not be credited to surplus and shall not inure to the benefit of any private member or individual.

ARTICLE VIII—AMENDMENTS

This constitution can be amended by a two-thirds vote at an annual meeting, provided the proposed change has been brought to the attention of the constituency at least ninety days previously.

Constitution Adopted August 1950

Article I — NAME AND OBJECTS

Section 1. The name of this organization shall be The American Scientific Affiliation, Incorporated.

Section 2. The objects of the Affiliation shall be:

(a) To promote and encourage the study of the relationship between the facts of science and the Holy Scriptures, believing that as God is the Author of the Book, as well as the Creator and Sustainer of the universe, there can be no discrepancy between the statements of the Bible and scientific observations when both are properly interpreted and understood.

(b) To provide a medium for the exchange of ideas by Christian men and science in regard to these matters.

(c) To disseminate the results of such studies and to carry out an educational program through publications, lectures, films, etc. for strengthening the faith of evangelical Christians and for the evangelization of the non-Christian world as well.

Section 3. The Affiliation shall be a nonprofit organization within the meaning of the law and should any profit result from the activities of the Affiliation it shall not inure to the benefit of any individual.

Article II — DOCTRINAL POSITION

- (1) The deity of our Lord Jesus Christ.
- (2) The substitutionary and sacrificial death of Jesus Christ for our sins and the historical fact of his bodily resurrection.
- (3) The presence and power of the Holy Spirit in the work of regeneration.
- (4) The unique inspiration, integrity, and authority of the Bible, as the Word of God.
- (5) The consummation of the Kingdom in the “glorious appearing of the great God and our Savior Jesus Christ.”

Article III — MEMBERSHIP

Section 1. The membership of the Affiliation shall consist of four classes, as follows:

(a) A Fellow shall be one who is actively interested in the aims and objects of the Affiliation and shall be one who is accepted as a scientist in his own particular branch of learning by virtue of his academic standing, or by fellowship or membership in other learned societies in his particular field, or by certification or licensing by the governing body or college of the field of science in which he is engaged. Fellows shall be entitled to all the rights and privileges of the Affiliation, and shall receive copies of all the publication of the Affiliation.

(b) A Member shall be one who is actively interested in the aims and objects of the Affiliation and shall be one who holds a degree from an accredited university or college in one of

the natural or social sciences. Members shall be entitled to all the rights and privileges of the Affiliation except those of voting and holding office, and shall receive copies of all the publications of the Affiliation approved by the Council for such distribution.

(c) An Associate shall be one who is actively interested in the aims and objects of the Affiliation and shall be one who is an undergraduate in an accredited university or college who is majoring in one of the natural or social sciences. Associates shall be entitled to attend the meetings of the Affiliation and shall be entitled to receive the publications of the Affiliation approved by the Council for such distribution.

(d) Honorary Fellows. An Honorary Fellow shall be one who is actively interested in the aims and objects of the Affiliation and shall be one whose qualifications would be such as to enable him to serve the Affiliation in the fields of biblical exegesis, oriental languages, etc.

Section 2. All Fellows, Members, Associates, and Honorary Fellows of the Affiliation shall subscribe to the doctrinal basis of faith.

Section 3. Any person who fulfils the qualifications set forth in this article may be elected a Member or Associate or Honorary Fellow by the Fellows of the Affiliation upon the recommendation of the Executive Council. Fellows may be elected from among the Members upon the recommendation of the Executive Council after having served as a Member of the Affiliation for at least one year.

Article IV — EXECUTIVE COUNCIL AND OFFICERS

Section 1. The affairs of the Affiliation shall be governed by an Executive Council composed of five members, one of whom shall be elected each year at the annual meeting of the Affiliation by the Fellows and only the Fellows of the Affiliation shall be eligible for election to the Executive Council.

Section 2. Each member of the Executive Council shall be elected for a term of five years. Each year one member shall retire from the Council and one member shall be elected.

Section 3. Where a member of the Executive Council resigns or expires before the end of his term of office, the vacancy shall be filled at the next annual meeting of the Affiliation by election as above.

Section 4. Previous to the annual meeting, the President shall appoint a nominating committee of at least three Fellows who shall nominate one or more Fellows to fill the vacancy or vacancies. Other nominations may be made by any Fellow of the Affiliation in writing at any time prior to the annual meeting.

Section 5. The officers of the Affiliation shall be elected by the Executive Council from its own ranks and shall consist of a President, a Vice President, and a Secretary-Treasurer. The term of office shall be for one year. The President shall be ex-officio chairman of the Council.

Section 6. The Editor of the Affiliation shall be appointed annually by the Executive Council and he shall be ex-officio, a member of the Executive Council without voting power during his term of office.

Section 7. The President shall be the presiding officer at all meetings of the Executive Council and of the Affiliation. He shall be an ex-officio member of every committee. The Vice President shall assume the duties of the President in case of absence or incapability on the part of the President.

Section 8. The Executive Council shall submit a written report to the membership at the annual meeting covering the activities and finances of the Affiliation during their term of office.

Section 9. Three members of the Executive Council shall constitute a quorum.

Section 10. The Secretary-Treasurer shall be responsible for the correspondence and all records of the Affiliation and for keeping the minutes and proceedings of meetings of the Executive Council and of the Affiliation. Under the control of the Executive Council, he shall have general supervision of the financial affairs of the Affiliation by a competent auditor appointed by the Executive Council.

Section 11. The fiscal year of the Affiliation shall be from one annual meeting to another.

Article V — MEETINGS

Section 1. the Affiliation shall hold an annual meeting and convention at a time and place to the designated by the Executive Council. In addition to this convention, the Executive Council may use its influence to stimulate and encourage the holding of local meetings where membership concentrations make such meetings possible and desirable.

Article VI — AMENDMENTS

Section 1. Amendments to the constitution may be proposed by means of a resolution of the Executive Council or by means of a petition signed by 20% or more of the Fellows.

Section 2. Ballots for any constitutional amendment shall be mailed tho the Fellows at least two months before the date appointed for counting the ballots, which date shall be stated on the ballots. If the total vote be at least one-third of the number of Fellows and two-thirds of the votes cast are favorable, the proposed amendment shall be adopted.

Section 3. Amendments to the by-laws may be enacted at any annual meeting of the Affiliation by a majority vote of the Fellows.

BY-LAWS

(1) The annual fees for Fellows shall be \$10; for members, \$5; and for Associates and Honorary Fellows, \$3.

Proposed Constitution for the ASA 4th Draft

ARTICLE I — NAME AND OBJECTS

Section 1. The name of this organization shall be The American Scientific Affiliation, Incorporated.

Section 2. The objects of the Affiliation shall be

(1) To investigate the philosophy and findings of science as they are related to Christianity and the Holy Scriptures.

(2) To disseminate the results of such studies to both the Christian and secular worlds.

Section 3. The Affiliation shall be a nonprofit organization within the meaning of the law.

ARTICLE II — DOCTRINAL STATEMENT

Section 1. The members of the Affiliation shall subscribe to the following doctrinal statements:

(1) The Holy Scriptures are the inspired Word of God, the only unerring guide of faith and conduct.

(2) Jesus Christ is the Son of God and through his atonement is the one and only Mediator between God and man.

ARTICLE III — MEMBERSHIP

Section 1. There shall be four classes of membership in the Affiliation, as follows:

(a) A Fellow shall be one who is actively interested in the objects of the Affiliation and who is currently engaged in scientific work. A Fellow must hold a doctorate degree or its equivalent in one of the natural or social sciences.

(b) A Member shall be one who is actively interested in the objects of the Affiliation and who holds a degree from a university or college in one of the natural or social sciences and who is currently engaged in scientific work.

(c) An Associate shall be one who is actively interested in the objects of the Affiliation. Associates shall be entitled to all of the rights and privileges of the Affiliation except those of voting and holding office.

(d) An Honorary Fellow shall be one who in the opinion of the Executive Council has made a significant contribution in promoting the objects of the Affiliation. Honorary Fellows shall be entitled to all the rights and privileges of the Affiliation except those of voting and holding office.

ARTICLE IV — EXECUTIVE COUNCIL

Section 1. The affairs of the Affiliation shall be governed by an Executive Council elected by the Fellows and Members.

Section 2. The officers of the Affiliation shall be elected by the Executive Council from its own ranks and shall consist of a President, a Vice President, and a Secretary-Treasurer.

ARTICLE V — AMENDMENTS

Section 1. Amendments to the constitution may be proposed by means of a resolution of the Executive Council or by means of a petition signed by five per cent of the total number of Fellows and Members.

Section 2. Ballots for any constitutional amendment shall be mailed to the Fellows and Members at least two months before the date appointed for counting the ballots, which date shall be stated on the ballots. If the total vote be at least one-third of the number of Fellows and Members and two-thirds of the votes cast are favorable, the proposed amendment shall be adopted.

BY LAWS

Section 1. Membership

(a) Fellow: Any Member who has shown active participation in the affairs of the Affiliation and who fulfills the necessary requirements may be elected to the grade of Fellow by the body of Fellows upon recommendation of the Executive Council. At least 20% of the Fellows must vote favorable for the candidate.

(b) Member: A Member may be elected by the Executive Council upon receipt of a signed application form and on the recommendation of a Fellow or Member.

(c) Associate: An Associate shall be elected in the same manner as a Member.

(d) Honorary Fellow: Any person may be elected an Honorary Fellow by the Executive Council.

(e) Each applicant for the grade of Member or Associate must complete an application form giving the necessary biographical data together with a signed doctrinal statement.

Section 2. Executive Council and Officers

(a) The Executive Council shall consist of five members, one of whom shall be elected each year by the Fellows and Members for a term of five years. Only Fellows shall be eligible for election to the Executive Council. Each year one member shall retire from the Council and one member shall be elected.

(b) Previous to the annual meeting, the President shall appoint a nominating committee of at least three Fellows who shall nominate one or more Fellows to fill the vacancy or vacancies. The nominating committee shall report to the President at least 30 days prior to the annual meeting. Other nominations may be made by any Fellow or Member in writing at any time prior to the election.

(c) If a member of the Executive Council resigns or dies before the end of his term of office, the vacancy shall be filled as in subsection “a.”

(d) The officers of the Affiliation shall be elected by the executive Council from its own ranks and shall consist of a President, a Vice President, and a Secretary-Treasurer. The term of office shall be for one year.

(e) Three members of the Executive Council shall constitute a quorum.

(f) The President shall be the presiding officer at all meetings of the Executive Council and at all business meetings of the Affiliation. He shall be an ex-officio member of every committee. The Vice President shall assume the duties of the President in case of absence or incapacity on the part of the President.

(g) The Secretary-Treasurer shall be responsible for the correspondence and all records of the Affiliation and for keeping the minutes and proceedings of all meetings of the Executive Council and of the Affiliation. Under the control of the Executive Council, he shall have general supervision of the financial affairs of the Affiliation.

(h) The Editor of the Affiliation shall be appointed annually by the Executive Council and he shall be ex-officio, a member of the Executive Council but without voting power during his term of office. The Editor shall be responsible for preparing and publishing at least four issues of the *Journal* per year, and he will have general supervision of all publications of the Affiliation which are authorized by the Executive Council.

(i) An audit of the books shall be made each year by a competent auditor appointed by the Executive Council and the auditor’s report shall be submitted to the Affiliation.

(j) The Executive Council shall submit a report to the membership at the annual meeting covering the activities and finances of the Affiliation during the past year.

(k) A complete history of any amendments to the constitution or by-laws shall be kept in the files of the Affiliation by the Secretary-Treasurer.

Section 3. Meetings

(a) The Affiliation shall hold an annual meeting and convention at a time and place to be designated by the Executive Council. In addition to this convention, the Executive Council shall use its influence to stimulate and encourage the holding of local meetings where membership groups make such meeting possible and desirable.

(b) The Executive Council shall hold at least one meeting each year.

(c) The fiscal year shall correspond with the calendar year.

Section 4. Local Sections

(a) A petition for the formation of a local section shall be signed by not fewer than ten (10) Fellows or Members. The Executive Council upon receipt of a petition to form a local section may authorize its formation.

(b) Section Secretaries shall forward to the Secretary-Treasurer of the Affiliation a report of each meeting and at the end of each fiscal year, a financial report for that fiscal year.

(c) The ASA may contribute to each section up to one dollar (\$1.00) a year for each member toward local expenses.

Section 5. Dues and Membership Records

(a) The annual fees for Fellows shall be \$10; for Members, \$5; and for Associates, \$3. The Secretary-Treasurer shall be responsible for billing the membership for the ensuing calendar year. Fellows or Members who are missionaries shall not be required to pay dues.

(b) At the same time, the Secretary-Treasurer shall include a form requesting information as to change of address or employment status, awards, degrees, etc., as well as a list of papers published during th previous year by all the membership. This information shall be used to keep the membership files up to date.

Section 6. Amendments

Amendments to the by-laws may be proposed at any annual meeting of the Affiliation by a majority vote of the Fellows and Members in attendance, or by means of a resolution of the Executive Council. Ballots for any amendments to the by-laws shall be mailed to the Fellows and Members at least two months before the date appointed for counting of ballots, which date shall be stated on the ballots. If the total vote is at least one-third of the number of Fellows and Members and a majority of the ballots received are favorable the proposed amendment shall be adopted.

Constitution of the ASA

ARTICLE I – NAME AND OBJECTIVES

Section 1. The name of this organization shall be The American Scientific Affiliation, Incorporated.

Section 2. The objectives of the Affiliation shall be

- (1) To investigate any area relating Christian faith and science.
- (2) To make known the results of such investigations for comment and criticism by the Christian community and by the scientific community.

Section 3. The Affiliation shall be a nonprofit organization within the meaning of the law.

ARTICLE II – DOCTRINAL STATEMENT

Section 1. the members of the Affiliation shall subscribe to the following doctrinal statements:

- (1) The Holy Scriptures are the inspired Word of God, the only unerring guide of faith and conduct.
- (2) Jesus Christ is the Son of God, who through his Atonement is the one and only Mediator between God and man.
- (3) God is the Creator of the physical universe and he has made it to function according to certain laws which are the legitimate subject of man's studies and investigations. The scientific approach is capable of giving reliable information about the natural world.

ARTICLE III – MEMBERSHIP

Section 1. The members of the Affiliation are men and women who have made a personal commitment of themselves and their lives to Jesus Christ as Lord and Savior, and who subscribe to the Doctrinal Statement of the Affiliation, and who pledge themselves to support the Objectives of the Affiliation in Article I.

Section 2. There shall be five classes of membership in the Affiliation, as follows:

- (a) A Member may be elected to be a Fellow providing he is actively interested in the objectives of the Affiliation and is currently engaged in scientific or related work. A Fellow must hold a doctorate degree or its equivalent in science or philosophy.
- (b) A person may be elected to be a Member providing he is actively interested in the objectives of the Affiliation and is currently engaged in scientific or related work. A Member must hold a baccalaureate degree in science or philosophy.
- (c) A person may be elected to be an Associate providing he is actively interested in the objectives of the Affiliation. Associates shall be entitled to all the rights and privileges of the Affiliation except those of voting and holding office.

(d) An Emeritus shall be either a Fellow or Member who has contributed regularly to the support and objectives of the Affiliation, but who finds himself by reason of age, unable to continue in active membership. Emeriti shall be entitled to all the rights and privileges of the Affiliation except those of voting and holding office.

(e) An Honorary Fellow shall be anyone, a Fellow, a Member, or a nonmember, who, in the opinion of the Executive Council, has made an outstanding contribution to the advancement of the objectives of the Affiliation. A Fellow or Member of the Affiliation may be elected an Honorary Fellow at any time, and election to Honorary Fellow does not alter the rights and privileges of such Members. A nonmember who is elected Honorary Fellow shall be entitled to all the rights and privileges of the Affiliation except those of voting and holding office.

ARTICLE IV – EXECUTIVE COUNCIL

Section 1. The affairs of the Affiliation shall be governed by an Executive Council elected by the Fellows and Members.

Section 2. the officers of the Affiliation shall be elected by the Executive Council from its own ranks and shall consist of a President, a Vice President, and s Secretary-Treasurer.

ARTICLE V – AMENDMENTS

Section 1. Amendments to the Constitution may be proposed by means of a resolution of the Executive Council or by means of a petition signed by five per cent of the total number of Fellows and Members.

Section 2. Ballots for any constitutional amendment shall be mailed to the Fellows and Member at least two months before the date appointed for counting the ballots, which date shall be stated on the ballots. If the total vote be at least one-third of the number of Fellows and Members and two-thirds of the votes cast are favorable, the proposed amendment shall be adopted.

BY LAWS

Section 1. Membership

(a) Fellow: Any Member who has shown active participation in th affairs of the Affiliation and who fulfills the necessary requirements may be elected to the grade of Fellow by the body of Fellows upon recommendation of the Executive Council. At least 20% of the Fellows must vote favorable for the candidate.

(b) Member: A Member may be elected by the Executive Council upon receipt of a signed application form and on the recommendation of a Fellow of Member.

(c) Associate: An Associate shall be elected in the same manner as a Member.

(d) Emeritus Fellow or Member: Any Fellow or Member may be elected an Emeritus Fellow or Emeritus Member by the Executive Council.

(e) Honorary Fellow: Any person may be elected an Honorary Fellow by the Executive Council.

(f) Each applicant for the grade of Member or Associate must complete an application form giving the necessary biographical data together with a signed doctrinal statement.

Section 2. Executive Council and Officers

(a) The Executive Council shall consist of five members, one of whom shall be elected each year by the Fellows and Members for a term of five years. Only Fellows shall be eligible for election to the Executive Council. Each year one member shall retire from the Council and one member shall be elected.

(b) Previous to the annual meeting, the President shall appoint a nominating committee of at least three Fellows who shall nominate one or more Fellows to fill the vacancy or vacancies. The nominating committee shall report to the President at least 30 days prior to the annual meeting. Other nominations may be made by any Fellow or Member in writing at any time prior to the election.

(c) If a member of the Executive Council resigns or dies before the end of his term of office, the vacancy shall be filled as in subsection “b.”

(d) The officers of the Affiliation shall be elected by the Executive Council from its own ranks and shall consist of a President, a Vice President, and a Secretary-Treasurer. The term of office shall be for one year.

(e) Three members of the Executive Council shall constitute a quorum.

(f) The President shall be the presiding officer at all meetings of the Executive Council and at all business meetings of the Affiliation. He shall appoint Committees or Commissions as required. He shall be an ex-officio member of every committee or commission. The Vice President shall assume the duties of the President in case of absence or incapacity on the part of the President.

(g) The Secretary-Treasurer shall be responsible for keeping the minutes and proceedings of all meetings of the Executive Council and of the Affiliation. Under the control of the Executive Council, he shall have general supervision of the financial affairs of the Affiliation.

(h) The Secretary-Treasurer shall submit a report to the membership at the annual meeting covering the activities and finances of the Affiliation during the past year.

(i) A complete history of any amendments to the Constitution or By-Laws shall be kept in the files of the Affiliation at the home office. A record of any amendments to the Constitution or By-Laws made during the year shall be submitted by the Secretary-Treasurer to the Home office of the Affiliation.

(j) An audit of the books shall be made each year by a competent auditor appointed by the Executive Council and the auditor’s report shall be submitted to the Affiliation.

(k) The Executive Council shall appoint an Executive Secretary for an indefinite period. The appointment is subject to review each year. The Executive Secretary shall be an ex-officio member of the Executive Council but without voting power.

(l) The Executive Secretary, under the direction of the Executive Council, shall have the duties responsibilities, and authority to:

- (1) Establish the Home Office.
- (2) Employ an office secretary (or secretaries).
- (3) Conduct elections, in accordance with the ASA Constitution, of
 - (a) officers of the Executive Council
 - (b) Fellows to the Executive Council
 - (c) Membership to Fellows, Honorary Fellows, or Emeritus Fellows

- (4) Process applications for ASA Membership.
- (5) Keep Membership files updated, and periodically provide a Membership Directory.
- (6) Mail dues notices, and notices of meetings and conventions.
- (7) Arrange for mailings: Journal, Newsletter, etc.
- (8) Conduct routine correspondence for the ASA.
- (9) Maintain archives of important ASA records such as:
 - (a) Minutes and proceedings of all meetings of the Executive Council and of the Affiliation as supplied by the Secretary-Treasurer.
 - (b) Membership lists and data.
 - (c) Important ASA correspondence.
 - (d) Data on ASA Annual Conventions.
 - (e) Reports of Boards, Commissions, and Committees.
 - (f) Maintain a complete file of all ASA publications.
- (10) Provide information as needed for the Executive Council.
- (11) Assist in the formation of Local Sections, and maintain liaison with each Local Section.
- (12) Maintain updated lists of officers for all Local Sections.
- (13) Serve as General Chairman of the ASA Annual Convention. Provide liaison between the Executive Council, Program Committee, and Local Arrangements Committee. Provide for publicity and local news media coverage at the conventions.
- (14) Provide liaison between the Executive Council and all working groups of the membership such as Boards, Commissions, Committees, and Local Sections.
- (15) Maintain for distribution a supply of ASA Journal issues, Monographs, books and such other publications as considered desirable by the Executive Council.
- (16) Promote contacts and liaison with other organizations which have similar purpose and interests to that of ASS.
- (17) Such other duties and activities as are required for the furtherance of the work and objectives of the ASA.

(m) The editors of the Affiliation shall be the Editor of the Journal, the Managing Editor of the Journal, and the Editor of the Newsletter. Each shall be appointed by the Executive Council for an indefinite period. The appointments are subject to review each year, but each may be brought up for review at any time by the appropriate board or the Council, at its own discretion or at the request of the person involved.

(n) the Editor of the Journal shall be responsible for preparing and publishing at least four issues of the Journal per year. He shall be an ex-officio member of the Executive Council but without voting power.

(o) The Editor of the Newsletter shall be responsible for preparing and publishing at least six issues of the Newsletter per year. He shall be ex-officio member of the Executive Council but without voting power.

Section 3. Meetings

(a) The Affiliation shall hold an annual meeting and convention at a time and place to be designated by the Executive Council. In addition to this convention, the Executive Council shall use its influence to stimulate and encourage the holding of local meetings where membership groups make such meeting possible and desirable.

(b) The Executive Council shall hold at least one meeting each year.

(c) The fiscal year shall correspond with the calendar year.

Section 4. Local Sections

(a) A petition for the formation of a local section shall be signed by not fewer than ten (10) Fellows or Members. The Executive Council upon receipt of a petition to form a local section may authorize its formation.

(b) Local Section Secretaries shall forward to the Secretary-Treasurer of the Affiliation a report of each meeting and at the end of each fiscal year, a financial report for that fiscal year. The Executive Secretary will prepare a summary report of local section financial activities for submission to the Secretary-Treasurer of the Affiliation.

(c) The ASA may contribute to each section up to one dollar (\$1.00) a year for each member toward local expenses.

Section 5. Dues and Membership Records

(a) The annual fees for Fellows shall be \$10; for Members, \$5; and for Associates, \$7, except that the fee for full-time students shall be \$3. The Executive Secretary shall be responsible for billing the membership for the ensuing calendar year. Fellows, Members or Associates who are missionaries shall not be required to pay dues.

(b) Any member or organization contributing \$25 will be designated “sustaining” and those contributing \$100 will be designated “patron.” These amounts cover both dues and contributions.

(c) Along with the annual dues notice the Executive Secretary shall include a requesting information from all the membership as to change of address or employment status, awards, degrees, etc., as well as a list of papers published during the previous year. This information shall be used to keep the membership files up to date.

Section 6. Amendments

Amendments to the by-laws may be proposed at any annual meeting of the Affiliation by a majority vote of the Fellows and Members in attendance, or by means of a resolution of the Executive Council. Ballots for any amendments to the by-laws shall be mailed to the Fellows and Members at least two months before the date appointed for counting of ballots, which date shall be stated on the ballots. If the total vote is at least one-third of the number of Fellows and Members and a majority of the ballots received are favorable the proposed amendment shall be adopted.

EXEMPTED FROM PAYMENT OF
MINIMUM FRANCHISE TAX
7/12/43

Secretary of State
Corporation Number
193067

Articles of Incorporation

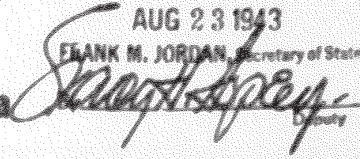
FILED

In the office of the Secretary of State
of the State of California

of the
THE AMERICAN SCIENTIFIC
AFFILIATION
Under the Laws

AUG 23 1943

FRANK M. JORDAN, Secretary of State



Of the State of California

Restriction of right
to amend articles

Yes

No

Know all men by these Presents: That we, the undersigned, have this day voluntarily associated ourselves together for the purpose of forming a corporation under the laws of the State of California.

And we hereby Certify,

First: That the Name of the Corporation shall be the

AMERICAN SCIENTIFIC AFFILIATION

Second: That the Purposes for which it is formed are

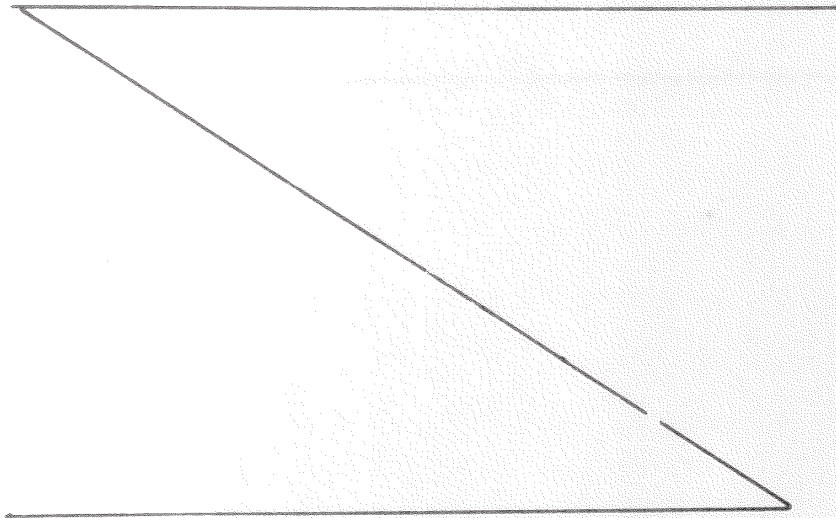
- 1) To integrate and organize the efforts of many individuals desiring to correlate the facts of science and the Holy Scriptures,
- 2) To promote and encourage the study of the relationship between the facts of science and the Holy Scriptures,
- 3) To promote the dissemination of the results of such studies.

This is a corporation which does not contemplate pecuniary gain or profit to the members thereof.

Third: That the County in this State where the Principal Office for the transaction of the business of the corporation is to be located is

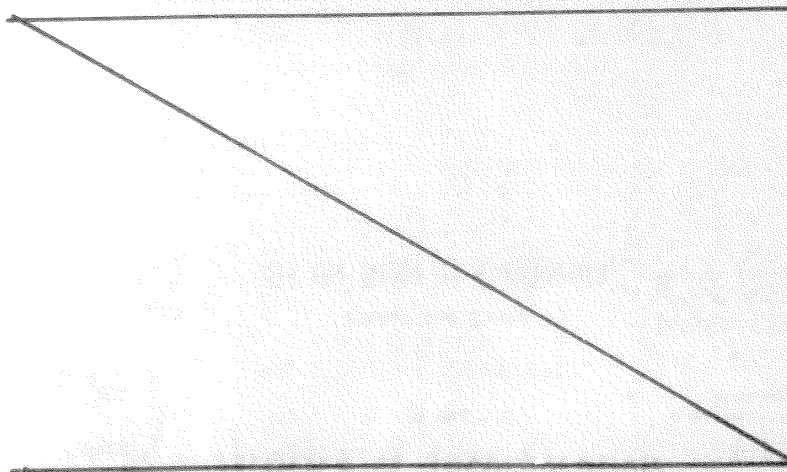
SAN DIEGO COUNTY

Fourth: That the number of Shares which may be issued by the Corporation is _____ Dollars each;
of the par value of _____ Dollars.
that the aggregate par value of all shares shall be _____



(SEE SEC. 290, CIVIL CODE)

Fifth: That the Classification of the shares of stock shall be



2.

SEE SEC 290, CIVIL CODE.

SIXTH: That the number of Directors of said Corporation shall be and that the names and residences of the directors who are appointed to act until the first annual meeting of shareholders or until the election and qualification of their successors are as follows, to-wit:

NAMES	WHOSE RESIDENCE IS AT
Irving A. Cowperthwaite	10 Willoughbr Road Milton, Massachusetts
Peter W. Stoner	56 North Hill Avenue, Apt. 10 Pasadena, California
Russell D. Sturgis	26 Sixth Avenue Collegeville, Pennsylvania
John P. Van Haltsma	1027 Benjamin Avenue Grand Rapids, Michigan
F. Alton Everest	1011 Encino Row Coronado, California

SEVENTH: The name of the existing unincorporated association which is being incorporated is the American Scientific Affiliation.

In Witness Whereof, we have hereunto set our hands this 25th day of June, nineteen hundred and forty three.

F. Alton Everest

Irving A. Cowperthwaite

STATE OF CALIFORNIA

County of San Diego } ss.

On this 9th day of July, 1972,
before me Francis E. Sparks a Notary Public in and for the
County of San Diego
State of California, personally appeared F. Alton Ernest

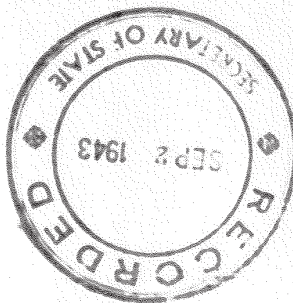
known to me to be the persons whose names are subscribed to the within instru-
ment, and acknowledged to me that they executed the same.

Witness my hand and official seal.

My Commission Expires July 26, 1980

Francis E. Sparks
Notary Public in and for said County and State

NOTARY PUBLIC in and for the County
of San Diego, State of California



193067

No. 1

Articles of
Incorporation
California

Office

AMERICAN
SCIENTIFIC
AFFILIATION

Dated _____, 19__

F. Alton Ernest
1011 Encinitas Row
Carlsbad, Calif.

AFFIDAVIT

STATE OF CALIFORNIA }
County of San Diego } SS:

On this day 5th of July, 1943,
before me, Francis E. Sparks, a Notary Public in
and for said County and State, residing therein, duly
commissioned and sworn, personally appeared F. Alton Everest,
who, being sworn, deposes and says: That the said
F. Alton Everest is the chairman of the American
Scientific Affiliation. That the American Scientific
Affiliation is an unincorporated association and that said
association has duly authorized its incorporation.
That F. Alton Everest has executed these articles in his
official capacity and by authorization of such association.

F. Alton Everest

Subscribed and sworn to before me this 5th day of
July, 1943.

Francis E. Sparks
Notary Public in and for said
County and State

My Commission Expires July 23, 1945
(Seal)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

5

AFFIDAVIT

STATE OF MASSACHUSETTS)
County of Norfolk) SS:

On this 29th day of June 1943,
before me, Frederick A. Gibney, a Notary Public in
and for said County and State, residing therein, duly
commissioned and sworn, personally appeared _____

Irving A. Cowperthwaite, who, being sworn, deposes and says:
That the said Irving A. Cowperthwaite is the Secretary-
Treasurer of the American Scientific Affiliation. That
the American Scientific Affiliation is an unincorporated
association and that said association has duly authorized
its incorporation. That Irving A. Cowperthwaite has
executed these articles in his official capacity and by
authority of such association.

Irving A. Cowperthwaite

Subscribed and sworn to before me this 29th day of
June, 1943.

Frederick A. Gibney
Notary Public in and for said
County and State

(Seal)

NOTARY PUBLIC
My Commission Expires Jan. 28, 1945

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

ACKNOWLEDGEMENT

STATE OF MASSACHUSETTS)
County of Norfolk) SS:

On this 27th day of July, 1943,
before me Frederick A. Giles, Jr. a Notary Public in and
for the county of Norfolk State of Massachusetts,
personally appeared Irving A. Cowperthwaite known to
me to be the person whose name is subscribed to the
within instrument, and acknowledged to me that he
executed the same.

Irving A. Cowperthwaite

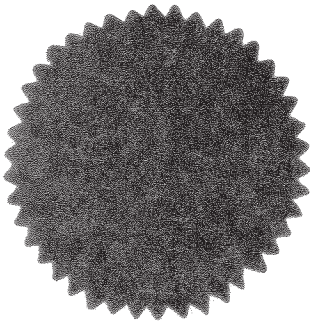
WITNESS my hand and official seal.

Frederick A. Giles, Jr.
Notary Public in and for
said county and State

NOTARY PUBLIC
My Commission Expires Jan. 25, 1948

7.

Commonwealth of Massachusetts
NORFOLK, ss.



WILLARD E. EVERETT

I, ~~XXXXXXXXXXXXXXXXXXXX~~ N, Clerk of the Supreme Judicial Court, within and for the County of Norfolk, the same being a Court of Record and Common Law Jurisdiction,

DO HEREBY CERTIFY that FRANCIS A. WILSON, Esquire, before whom the annexed affidavit was taken, and whose name is subscribed thereto, was at the time of taking the same a NOTARY PUBLIC, in and for said Commonwealth of Massachusetts, residing in said County of Norfolk, duly commissioned and qualified, having full power and authority to take the proof or acknowledgement of deeds and other instruments to be recorded in said Commonwealth, and to administer and certify oaths, and that I am well acquainted with the handwriting of such Notary Public and verily believe that the signature subscribed to the annexed affidavit is genuine; and that an impression of seal of such officer is not required by law to be filed in my office.

Witness, my hand, and the seal of said Court, at Dedham, in said County and Commonwealth, this 17th day of AUGUST, A. D. 1924.

Willard E. Everett CLERK

Filing Fee \$25.00

FORM NP-29

**ARTICLES OF INCORPORATION
UNDER THE
GENERAL NOT FOR PROFIT CORPORATION ACT**

(These Articles Must Be Filed in Duplicate)

(Do Not Write in This Space)
Date Paid 8-22-78
Filing Fee \$ 25.00
Clerk [Signature]

Secretary of State, Springfield, Illinois.

We, the undersigned,

(Not less than three)

Name	Number	Street	Address City	State
Dr. James O. Buswell III	1017	Eddy Court,	Wheaton IL.	60187
Dr. Howard H. Claassen,	1N018	Ethel Street,	Wheaton, IL.	60187
William D. Sisterson,	500	Meirs Court,	Elgin, IL.	60120

being natural persons of the age of twenty-one years or more and citizens of the United States, for the purpose of forming a corporation under the "General Not For Profit Corporation Act" of the State of Illinois, do hereby adopt the following Articles of Incorporation:

- The name of the corporation is: THE AMERICAN SCIENTIFIC AFFILIATION, INC.
- The period of duration of the corporation is: perpetual
(Please state "perpetual" or a definite number of years)
- The address of its initial Registered Office in the State of Illinois is: Five Douglas Avenue,
xxxx Street in the City of Elgin (60120) County of Kane and
(Zip Code)
the name of its initial Registered Agent at said Address is: JOHN E. JUERGENSMEYER
- The first Board of Directors shall be five (5) in number, their names and addresses being as follows:
(Not less than three)

Name	Number	Street	Address City	State
Dr. James O. Buswell III	1017	Eddy Court,	Wheaton, IL.	60187
Dr. Howard H. Claassen	1N018	Ethel Street,	Wheaton, IL.	60187
Dr. Dewey K. Carpenter	4540	Bluebell Drive,	Baton Rouge, LA	70808
Dr. Robert L. Herrmann	7777	South Lewis Avenue,	Tulsa OK	74102
Dr. A. Kurt Weiss, Univ. of Oklahoma Health Sciences Center,			Oklahoma City	OK 26901

5. The purpose or purposes for which the corporation is organized are: (a) To integrate and organize the efforts of many individuals desiring to correlate the facts of science and the Holy Scriptures; (b) To promote and encourage the study of the relationship between the facts of science and the Holy Scriptures; (c) To promote the dissemination of the results of such studies. This is a corporation which does not contemplate pecuniary gain or profit to the members thereof; (d) The Corporation may engage in other charitable purposes and may receive contributions and pay them over to organizations that are exempt from taxation under Sections 501(a) and 501(c)(3) of the United States Internal Revenue Code; (e) No part of the net earnings of the corporation shall inure to the benefit of, or be distributable to, its members, trustees, officers, or other private persons, except that the Corporation shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth in this Article. No substantial part of the activities of the Corporation shall be the carrying on of propaganda, or otherwise attempting, to influence legislation, and the Corporation shall not participate in (including the publishing or distribution of statements) any political campaign on behalf of any candidate for public office. Notwithstanding any other provision of these Articles, the Corporation shall not carry on any other activities not permitted to be carried on by (a) a corporation exempt from Federal income tax under Section 501(c)(3) of the Internal Revenue Code of 1954 (or the corresponding provision of any future United States Internal Revenue Law) or (b) by a corporation, contributions to which are deductible under Section 170(c)(2) of the Internal Revenue Code of 1954 (or the corresponding provision of any future United States Internal Revenue Law). Notwithstanding any other provisions of these Articles this Corporation shall not, except to an insubstantial degree, engage in any activities or exercise any powers that are not in furtherance of the purposes of this Corporation; (f) Upon the dissolution of the

1472924

21

Corporation, the Board of Trustees shall, after paying or making provisions for the payment of all of the liabilities of the Corporation, dispose of all of the assets of the Corporation exclusively for the purposes of the Corporation in such manner, or to such organization or organizations organized and operated exclusively for charitable, educational, religious, or scientific purposes as shall at the time qualify as an exempt organization or organizations under Section 501(c) (3) of the Internal Revenue Code of 1954 (or the corresponding provision of any future United States Internal Revenue Law), as the Board of Trustees shall determine. Any of such assets not so disposed of shall be disposed of by the Circuit Court of the County in which the principal office of the Corporation is then located, exclusively for such purposes or to such organization or organizations, as said Court shall determine, which are organized and operated exclusively for such purposes. (g) Said Corporation is organized exclusively for charitable, religious, educational, and scientific purposes, including, for such purposes, the making of distributions to organizations that qualify as exempt organizations under Section 501(c) (3) of the Internal Revenue Code of 1954 (or the corresponding provision of any future United States Internal Revenue Law).

FILED FOR RECORD
KANE COUNTY, ILL.

1472924

1978 AUG 31 AM 10: 15

Eleanor E. Jungella
RECORDER OF DEEDS

(NOTE: Any special provision authorized or permitted by statute to be contained in the Articles of Incorporation, may be inserted above.)

(INCORPORATORS MUST SIGN BELOW)

James O. Buswell III
Howard H. Claassen
William D. Sisterson

Incorporators

ACKNOWLEDGMENT

STATE OF ILLINOIS,
County of Kane

ss.

I, ROBERTA P. HINES, a Notary Public do hereby certify that on the 7th day of August, 1978 Dr. James O. Buswell III
Dr. Howard H. Claassen, and William D. Sisterson
(Names of Incorporators)

personally appeared before me and being first duly sworn by me severally acknowledged that they signed the foregoing document in the respective capacities therein set forth and declared that the statements therein contained are true.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the day and year above written.



Roberta P. Hines

Notary Public

FORM NP-29
ARTICLES OF INCORPORATION
under the
GENERAL NOT FOR PROFIT
CORPORATION ACT
of

FILED
AUG 22 1978

SECRETARY OF STATE
CORPORATION DEPARTMENT
TELEPHONE: (217) 782-7880

(These Articles Must Be Executed and Filed in
Duplicate)

Filing Fee \$25.00

Jurgensmeyer, Zimmerman & Schmitz
W. S. Douglas Ave. Suite 500
W. Gen. Bldg. 60120
of 6.00

1472924

Certificate No 37005-A



1472924

1978 AUG 31 AM 10:15

FILED FOR RECORD
KANE COUNTY, ILL.

RECORDED OF DEEDS
Eleanor E. Langford

To all to whom these Presents Shall Come, Greeting:

Whereas, Articles of Incorporation duly signed and verified of

THE AMERICAN SCIENTIFIC AFFILIATION, INC.

have been filed in the Office of the Secretary of State on the 22nd day of August A. D. 1978, as provided by the "GENERAL NOT FOR PROFIT CORPORATION ACT" of Illinois, approved July 17, 1943, in force January 1, A. D. 1944;

Now Therefore, I, ALAN J. DIXON, Secretary of State of the State of Illinois, by virtue of the powers vested in me by law, do hereby issue this Certificate of Incorporation and attach thereto a copy of the Articles of Incorporation of the aforesaid corporation.

In Testimony Whereof, Thereto set my hand and cause to

be affixed the Great Seal of the State of Illinois.

Done at the City of Springfield this 22nd

day of August AD 1978 and

of the Independence of the United States

the two hundred and 3rd



Alan J Dixon

SECRETARY OF STATE

1472924

3

American Scientific Affiliation Executive Council Rotation 1941–1985

Van Haitzma, John P.	1941–1942
Cowperthwaite, Irving A.	1941–1943
Sturgis, Russell D.	1941–1944
Stoner, Peter W.	1941–1945
Everest, F. Alton	1941–1946
Barnes, Marion D.	1943–1947
Monsma, Edwin Y.	1944–1948
Mixter, Russell L.	1945–1949
MacRae, Allan A.	1946–1950
Everest, F. Alton	1947–1951
Voskuyl, Roger J.	1948–1952
Kulp, J. Laurence	1949–1953
Mixter, Russell L.	1950–1954
Hartzler, H. Harold	1951–1955
Sutherland, Brian P.	1952–1956
Eggenberger, Delbert N.	1953–1957
Oorthuys, Hendrik J.	1954–1958
Howitt, John R.	1955–1959
Hartzler, H. Harold	1956–1960
Bullock, Wilbur L.	1957–1961
Hearn, Walter R.	1958–1962
Weaver, Henry	1959–1963
Cassel, J. Frank	1960–1964
Anderson, V. Elving	1961–1965
Knudsen, Robert D.	1962–1966
Fischer, Robert B.	1963–1967
Bube, Richard H.	1964–1968
Ault, Wayne U.	1965–1969
Freed, Virgil F.	1966–1970

Hatfield, Charles	1967–1971
Schweitzer, George K. resigned	
Boardman, Donald C. appointed . .	1968–1972
McIntyre, John A.	1969–1973
Collins, Gary	1970–1974
Willis, David L.	1971–1975
Stipe, Claude E.	1972–1976
Haas, Jack W.	1973–1977
Carpenter, Dewey K.	1974–1978
Buswell III, James O.	1975–1979
Claassen, Howard	1976–1980
Weiss, A. Kurt	1977–1981
Herrmann, Robert L.	1978–1981 (to Executive Director)
Willis, David L.	1982
Lee, Chi-Hang	1979–1983
Yamauchi, Edwin M.	1980–1984
Munro, Donald W.	1981–1985
Heddendorf, Russell	1982–1986
Hunt, Ann H.	1983–1987
Olson, Edwin A.	1984–1988
Hummel, Charles E.	1985–1989

American Scientific Affiliation Officers 1941–1985

YEAR	PRESIDENT	VICE PRESIDENT	SECRETARY/SECY-TREAS
1941	Everest	—	—
1942	Everest	—	Cowperthwaite
1943	Everest	—	Cowperthwaite
1944	Everest	Monsma	Barnes
1945	Everest	Monsma	Barnes
1946	Everest	MacRae	Barnes
1947	Everest	MacRae	Barnes
1948	Everest	MacRae	Barnes
1949	Everest	MacRae	Mixter
1950	Everest	Voskuyl	Mixter
1951	Mixter	Voskuyl	Hartzler
1952	Mixter	Kulp	Hartzler
1953	Mixter	Sutherland	Hartzler
1954	Mixter	Sutherland	Hartzler
1955	Hartzler	Sutherland	Oorthuys
1956	Hartzler	Sutherland	Oorthuys
1957	Hartzler	Bullock	Oorthuys
1958	Hartzler	Bullock	Oorthuys
1959	Hartzler	Bullock	Hearn
1960	Hartzler	Weaver	Hearn
1961	Cassel	Weaver	Hearn
1962	Weaver	Hearn	Anderson
1963	Anderson	Cassel	Knudsen
1964	Anderson	Cassel	Knudsen
1965	Anderson	Fischer	Knudsen

Appendix 9

YEAR	PRESIDENT	VICE PRESIDENT	SECRETARY/SECY-TREAS
1966	Fischer	Ault	Knudsen
1967	Fischer	Bube	Freed
1968	Bube	Hatfield	Freed
1969	Hatfield	Ault	Boardman
1970	Hatfield	Boardman	McIntyre
1971	Boardman	McIntyre	Kreider
1972	Boardman	McIntyre	Willis
1973	McIntyre	Collins	Stipe
1974	Collins	Willis	Haas
1975	Willis	Haas	Carpenter
1976	Stipe	Haas	Buswell
1977	Haas	Carpenter	Claassen
1978	Buswell	Carpenter	Weiss
1979	Weiss	Claassen	Herrmann
1980	Weiss	Herrmann	Lee
1981	Herrmann	Lee	Yamauchi
1982	Lee	Yamauchi	Munro
1983	Yamauchi	Munro	Heddendorf
1984	Munro	Heddendorf	Hunt
1985	Heddendorf	Hunt	Olson

ARTICLE NO. 1

Putting God Right With Scientists

"Where wast thou when I laid the foundations of the earth? Declare it if thou hast understanding." (Job 38:4)

SOME time ago we were informed that at the suggestion of leading Fundamentalists, a group was to be formed under the name "American Scientific Affiliation," to be comprised of scientists who consider themselves Fundamentalists. These men would be called upon to pass upon manuscripts prepared for publication by Christian institutions, whenever matters relating to science were involved. This would prevent Christian publishers from being made responsible for statements not scientifically correct.

To our knowledge some of the members of this affiliation are earnest Christians, eager to overcome the opposition to Christian teachings on the part of scientists in general. This is a worthy object if these learned gentlemen are competent to speak concerning Biblical interpretation, and if they are determined to contend for divine revelation, though it may in some

cases bring them the contempt of scientists.

A book has now come forth with the approval of this Affiliation, and from an orthodox distributor to give us a supposedly authoritative word on the meaning of the first chapter of Genesis. It is written by Prof. Peter Stoner of Pasadena Junior College, a member of the group, and the title is "From Science to Souls."

This book has been favorably reviewed in two or three fundamental magazines and it is believed that these have been given without careful study of the contents, and perhaps with the feeling that anything from this well known publishing house is to be considered safe. The directors and research staff of the American Prophetic League however, after giving careful attention to Prof. Stoner's theories, and after having consulted with competent Christian

scholars, have been led to take a stand against the dissemination of these teachings and in a series of articles we will endeavor to awaken our readers to the implications.

Prof. Stoner at the outset reveals his concern over the fact that widely accepted interpretations of Genesis contradict modern science. "We cannot hope to teach our young people these theories," he says, "and then expect that their faith will not be shaken when they study science." Responsibility for sending youth to college with an interpretation of Genesis that can be reconciled with modern science, is put squarely on the shoulders of preachers and Christian parents. He writes:

"We accuse colleges of destroying the faith of young people . . . Too often it is true because we have given our young people false teaching sure to lead them into dangers. Let us make sure that what we teach our children is true to the best information

Prophecy 8'44

ditions one believes in ages geology, he should move from the Fundamentalist position to that of Modernism."

(NOTE: The ruin and reconstruction theory does not necessarily involve the idea of reconciling evolutionary geology with Genesis. Geologists claim that the fossils found in the rocks which provide basis for belief in the ages geology, are not of a kind which would live in an ideal earth, or a pre-

Page 10

available both from science and the Bible, then we will not have them slipping away from the Bible." (pp. 59-60)

Apparently this writer is of the firm opinion that as to creation, scientists of his particular school have spoken the final word. *But, how do we know it?*

Certainly Bible teachers have erred in the past in trying to harmonize Genesis with the Nebular hypothesis, and later with the Planetesimal hypothesis and with the Tidal hypothesis—all of them discarded by most scientists now. But the latest is that the earth, during the course of two billion years, developed from a dark spiral nebulae—whirling dust that finally solidified.

This is the theory adopted by Prof. Stoner to explain "creation" and he maintains that v. 2 of Genesis precisely describes a dark nebulae, out of which all things came during the various "days" of creation, each representing millions of

Page 7

Adamite Eden. Some hold however on purely theological grounds that the original earth had for some reason undergone a cataclysm, leaving it for a time darkened. The fossils, save a few known to be recent, are remains of plants and animals which perished in the time of Noah. Thus they reject evolution in all its implications as pure guess-work.)

(Next issue: "God on the Witness Stand")

years. The reason a "dark" nebulae is picked, is because v. 2 refers to darkness on the face of the deep, for a light nebulae does not differ in material from the dark, except that it is lighted up by nearby suns.

"We need no longer hang our heads," says Prof. Stoner, "when the critic points to these verses. *It cannot be considered absurd to think the earth came from dark nebulae.*" This may afford slight relief to some Christians, but scientists will find plenty of other reasons to ridicule Christian beliefs.

We are always glad when science seems to have arrived at some settled conclusion which corroborates Scripture. But it seems to us our first concern must be to decide as to what Scripture plainly says on a topic, and if it appears absurd to so-called scientists, we must be prepared either to let them laugh, or give up the Bible. Prof. Stoner's interpretation is certain to be met with opposition from many who are worthy to be considered Bible scholars as well as scientists.

The catastrophe interpretation, making v. 2 refer to a cataclysmic upset which had occurred prior to the present conditions on earth, and viewing the six days work as a re-fitting of the earth for the habitation of man—the theory adopted by the majority of orthodox teachers—is cast aside by Prof. Stoner as entirely unsatisfactory to scientists.

"What do we know," he asks

Page 8

Answering the teaching that it was just prior to the creation of man that God caused the dry land to appear, Prof. Stoner says: "Any geologist can produce definite evidence that *it was hundreds of millions of years ago that our continents were formed.*" The word "any" preceding "geologist" makes Mr. Stoner's statement too sweeping. There are scientists who definitely disagree with these theories.

Certainly not all scientists regard the catastrophe interpretations as understood by many, as impossible for one of the latest books, "Harmony of Science and Scripture" by Prof. Theo. Schwarze, formerly of New York University, adopts it as the only logical reconciliation of Scripture and geological evidence. There are other well qualified Christian scientists who likewise hold it.

As to the days of Genesis being geological ages, only recently Prof.

Page 9

Prophecy 8'44

(p. 56) "about the early destruction of the earth by the fall of Satan? *Nothing!*" We might ask how much we actually know about a dark nebulae two billion years ago, but Mr. Stoner seems to have unshakable conviction based upon astronomical photographs.

On p. 58 he adds: "We could not convince any geologist that light first appeared on this planet 6,000 years ago"—yet the cataclysmic theory does not involve this as Mr. Stoner must be aware. The teaching is that after a period of darkness on earth, God again called forth light for this earth on the first day of the reconstruction work.

As to convincing the scientists, we are led to wonder if Prof. Stoner is about to offer them some explanation of the Satanic temptation, the fall of man, the curse on nature, the confusion of tongues, the deluge, and other vital points, that will likewise be acceptable to the unregenerate mind. His book does not intimate how the rest of the Genesis story is to be carried out in keeping with the timeclock adopted.

It is certain that he does not accept the approved chronology for he says: "The remains of man are found back as far as one million years. We may be faulty in our time of 6,000 years to Adam. It is possible that there are gaps in the geology not detected and there may be some errors in the dating of the earlier remains of man."

Prophecy 8'44

F. L. Marsh of Union College, Lincoln, Nebr., has written: "My observation has been that the only reason for assuming that the days were long ages of time was in order to form a compromise between evolutionary geology, organic evolution and creationism—as unnatural a thing as expecting homogeneity in a mixture of water, oil and sand."

Dudley Joseph Whitney, a California scientist with whom we have corresponded for years, writes: "It matters not whether a man believes in age-day creation or the ruin and reconstruction theory, he cannot accept both ages-geology and all the statements of Genesis, for ages geology allows no real deluge. It allows no time whatever when the earth was in an Edenic condition, and it has man start as a low browed savage long before the creation of Adam and Eve in the image of God. If under these con-

Astronomers "Up In the Air"

*"Lift up your eyes on high, and behold who hath created these things."
(Isa. 40:26)*

A STARTLING announcement came from Mt. Wilson Observatory in October, which made scores of books on astronomy in need of immediate revision. Some of the Bible teachers also who have recently been re-interpreting the first chapters of Genesis to fall in with certain theories of swirling nebulae as the process by which the earth was evolved in the course of two billion years, will see their teachings go higher than a kite. Even the astronomical pictures which adorn some of their books

must now be given brand new explanations.

Dr. Walter Baade had pushed the great 100-inch telescope on Mt. Wilson to the utmost limit, by "treating it as a baby" (as he put it), until he succeeded in getting photographs which show that the great elliptical patches of light, long taken to be areas of swirling dust and gas, from which planets were thought to evolve, are actually stars of two different colors.

The sensitized plates heretofore used in photographing were not

Prophecy 12-'45

Page 9

capable of registering the two types and a blotch effect was the result. Dr. Baade, long suspecting that there were stars of a bright red hue, prepared a red-sensitized plate capable of separating red from blue, if the theory be correct. And after a four hour exposure under nearly perfect atmospheric conditions, he got pictures which separated the elliptical blotches of light into separate stars.

Noted astronomers say the discovery will revolutionize concepts of how the universe was created. The gas and dust clouds which astronomers believed would remain the mystery of the sky until the big 200-inch Palomar telescope gets into operation, are already explained on a new basis altogether.

The publications of England's Royal Astronomical Society speculate on the startling implications. Contrary to the classical picture of creation by Sir James Jeans, that nebula started as a sphere and, spinning, became elliptical, finally throwing out matter from spiral arms, Dr. Baade's work shows that such a conception must be discarded.

"The difference in nebulae," says Dr. Baade, "may have nothing whatever to do with the evolutionary development at all. A cow doesn't develop into a horse."

In *Prophecy* of Aug. 1944 we gave considerable attention to a new book, "From Science to Souls" (Moody Press), an attempt of an earnest Christian man, Prof. Peter Stoner, to bring the teaching of

Page 10

Genesis into harmony with the scientific position, so that "the faith of young people should not be shaken when they study science."

Gen. 1:2 was said to precisely describe "dark nebulae" out of which the planet evolved in the course of two billion years. The six days of Genesis were said to mean ages of millions of years each, with a suggestion that they may have been separated by other long ages not mentioned, and which would be necessary to meet the terms of scientists. The days might be taken either as geological periods or as breaks between the geological periods.

In expressing caution as to making radical changes in the text of Genesis in order to make the account in harmony with popular scientific theories, we expected to have the full support especially of all those men considered leaders of orthodoxy. We added to our own reasons for inability to take the day of Genesis as geological ages, quotations from both scientists and recognized Hebrew scholars. To our surprise, we found the Stoner book hailed in leading Fundamentalist papers as the solution to our problem, and certain learned leaders openly discounted any comment from *Prophecy Monthly*, with hints that its editors were not competent to deal with such questions.

On learning of the Mt. Wilson discovery, we had the hardihood to write Prof. Baade, inquiring as to what effect the discovery might have upon the teaching that the

Prophecy 12-'45

earth came from dark nebulae. We quote his answer of Oct. 13:

"Dear Dr. Brooks:

"Since not a single one of the many theories proposed to explain the origin of our solar system has withstood the subsequent critical

tests, we do not know at present how the earth was formed. If therefore, the account in Genesis must be put in agreement with one of these discarded theories it looks bad for Genesis.

W. Baade."

Scientists Decide Universe Was Created

MEMBERS of the American Scientific Affiliation, an organization comprised of scientists of Christian profession, who in some sense believe in the divine inspiration of the Scriptures, have just brought forth a book entitled: "Modern Science and the Christian Faith."

It consists of 11 papers by as many writers and contains much that is illuminating and valuable, but to our disappointment, we find some of its chapters still supporting the "geological age-day"

Page 8

with scientists, and no sooner was the above book in the mails than the newspapers came out with an authoritative report of the American Physical Society, an affiliation of top scientists, giving the latest conclusions on cosmogony. Said this report

"Cosmogony, the scientific version of creation, always has differed tremendously from both events and timing of the Bible. Today's cosmogony shows three revolutionary changes closer to Genesis.

"The study was reported by Drs. Ralph A. Alpher and Robert C. Herman of the Johns Hopkins Applied Physics Laboratory. They credited recent studies by Prof. G. Gamow of George Washington University, Washington, D. C. Funds were supplied by the U. S. Navy Bureau of Ordnance.

"Genesis' first sentence says God created the heavens and the earth. *Today's new science says the earth was created at the same instant as the heavens—that is, with all the rest of creation.* Hitherto science has held that the earth was a rather late comer."

The decision at one stroke cancels a mass of literature given to an attempt to show how this planet was whirled into existence and brought to its present state through some two billion years of evolutionary processes. And it is this theory which some eager Bible teachers have long tried with poor success to reconcile with the Genesis statements as to the six days work of God. But now the

Prophecy 5:49

theory and trying to fit the six-day work of Genesis into a scheme of different geological ages of millions of years each during which the earth evolved—this despite the fact that many competent Bible teachers have shown that this is bad exegesis from the standpoint of the Bible, leading to a number of confictions with other Scripture statements!

The remarkable thing is that the theory of the earth's development from other planets has for some years been losing ground

Prophecy 5:49

leading scientists have come to see that all came into existence at one time, and within perhaps an hour. The report continues:

"The Bible had God's creation taking six days. In the scientific version today the essential creation was all done in one hour. That is much closer to Genesis than previous billions of years between steps."

Here the scientists create new difficulties by trying to assume the role of Bible teachers, but many a Bible teacher will instantly recognize that the six-day work was not intended to describe the *original* creation of the universe, but that it had to do with the reconstruction of this one planet, following a period of darkness and chaos into which it had fallen subsequent to its creation ages before.

These gentlemen may not know of the Scriptural distinction between God's *creative* work and His *fashioning* work from materials already in existence. The Hebrew word for "create" ("to bring into existence without the aid of pre-existing materials") is not used in the six-day work, except with reference to the human spirit and animal life then placed on earth. This word, used 48 times in the Bible, is always used with reference to God. Man can "make" (fashion some things from existing material) but he cannot *create*.

Of the original bringing into existence of the universe, Scripture says: "He spake and it was

Page 9

done: He commanded and it stood fast." (Psa. 33:9) These scientists may be right in saying the whole thing was done in one hour. With this Gen. 1:1 agrees: "In the former (ancient) times God brought into existence out of nothing the universe and the earth (not the rest of the universe) BECAME desolation and emptiness."

That it was not *created* in such a state is shown in Isa. 45:18, where the words: "created it not *in vain*" should read "in desolation"—the same word rendered "without form" in Gen. 1:2. Out of this desolation, due to some cataclysmic judgment in former times, God rescued the scene in six solar days (if words mean anything) and prepared it to be the habitation of a new order of creatures. Scientists have long said that the earth bears the marks of some terrific catastrophe in past ages—even prior to the deluge of Noah's time.

Early in 1946 this magazine carried an article reporting the announcement of leading scientists that late evidence pointed to the fact that the entire universe, including our planet, is of the same age. This earth could not have developed as an offshoot of much older planets, as so long believed. These conclusions arose from the latest proposition in chemistry, showing that previous methods of estimating the age of the solar system were untenable.

Another decision reported from the American Physical Society is

Page 10

posed to explain the origin of our solar system has withstood the subsequent critical tests, *we simply do not know at present how the earth was formed.* If therefore the account of Genesis must be put in agreement with one of these discarded theories, it looks bad for Genesis."

that the statement of Gen. 1 that God said: "Let there be light" is now recognized as in keeping with science. "The scientific story today starts with light, instead of with matter. The scientific name for it is 'radiation.' Today's new cosmogony does not attempt to tell what created the light."

It is interesting to note that on Day 4, when God called upon the light bodies to resume their functions toward the earth, it is not said that He then "created" them, but that He fashioned them, and the original word for "light" used here is not the same as in v.3. Of these "lights" of Day 4 a word is used which has a locative prefix, indicating light-attracting and diffusing bodies.

The difficulties in reconciling modern science with Scripture have doubtless been as much on the side of poor understanding of Scripture, as on the side of ever-changing theories of scientists. When science becomes established on any point and is brought alongside rightly-interpreted statements of the Bible, there is always harmony. It does however, seem unfortunate that our *Christian* scientists just at this juncture are starting out to defend the discarded "old earth" theory, twisting Scripture statements to effect some sort of a reconciliation.

As Prof. W. Bader, the well known astronomer of Mt. Wilson Observatory, wrote this editor some time ago: "Since not a single one of the many theories pro-

Prophecy 5:49

At least we have arrived at the time when some of the greatest of our men of science admit that man's theories do not stand up, and state frankly that nothing but the creative act of Almighty God can account for the universe, which must have come into existence all at one time.

PROPHECY MONTHLY

Official Publication of

AMERICAN PROPHECIC LEAGUE, inc.

Profs Contribute To Science Book; Harrison Writes Missionary Story

Two former Wheaton professors and the dean of the college are included in the group of scientists responsible for the American Scientific Affiliation's new book, *Modern Science and the Christian Faith*.

Dr. Roger Voskuyl, dean of the college, has written the introductory chapter, and Dr. Hawley O. Taylor, who retired in 1947 as chairman of the physics department, was responsible for the chapter on mathematics and prophecy. The chapter on anthropology is by Mr. George Horner, former instructor in anthropology and archaeology.

Aimed to interest college and university students, the book is intended to relate clearly the Christian approach to science and to validate scientific statements in the Bible.

Dr. Russell Mixer, professor of zoology, is secretary of this affiliation of about eighty bona fide scientists who are interested in promoting scholarly work in science by Christians.

Dr. Eugene M. Harrison, associate professor of missions, has announced that his new book, *Faith On Fire*, is now in the hands of the Van Kampen press for printing.

Faith on Fire is a sequel to *Heroes Of Faith On Pioneer Trails*. It deals with the life stories of eight missionaries: Hiram Bingham of the Sandwich Islands, Saddhu Sundar Singh of India, James Coleridge Patterson of Melanesia, Solomon Ginsberg of Brazil, James Chalmers of New Guinea, Alexander McKay of Uganda, Mary Slesser of Calabar, and James Wilson, the missionary sea captain.

*The Wheaton Record
of Wheaton College
Fall 1948*

Taylor Faculty Members Elected To Science Post

Upland, Feb. 25.—Two members of the faculty of Taylor University, Professors Milo A. Rediger and Keith D. Crane, were recently elected members of the American Scientific Affiliation, it was announced by Dr. William J. Tinkle, also of Taylor University and a member of the affiliation for three years.

Membership in this international organization is by invitation and vote of the five directors. The two scientists were invited to become members by Dr. Tinkle.

The ASA endeavors to link the various branches of science to each other and to the Bible, which each

member accepts as the word of God. Extensive literature is now being written by the organization.

Prof. Rediger, a graduate of Taylor and of New York University, teaches psychology here. Prof. Crane who attended Michigan State College, Alabama Polytechnic Institute and Washington University, is now professor of chemistry at Taylor. Teacher of biology and chairman of the division of science, Dr. Tinkle graduated from Ohio State University.

For Scientists by Scientists

MODERN SCIENCE AND CHRISTIAN FAITH. *A symposium by eleven members of The American Scientific Affiliation. Van Kampen Press, Chicago. 1948. 289 pages. \$3.00.*

AT LAST the men who know both science and Christianity have answered the call of the students who would like to know more about both—and about their relationship to each other.

The answer is a book of ten chapters—one each on astronomy, geology, biology, chemistry, physics, psychology, mathematics, medicine, anthropology, and archaeology. Its purpose is to help students of science bring together their school knowledge and the statements of Scripture.

The work is a delightful book from many points of view. It is that rare kind of book written simply enough for laymen but containing suggestions profound enough to hold the attention of the advanced students. Though some will read only the sections pertaining to their special interests, perusal of the whole book will be of great help in rounding out the world view—in seeing the clear correlation which exists between astronomy and the first chapter of Genesis, geology and the Bible, Christianity and anthropology, and archaeology and the Bible. The book ought to increase the reader's appreciation of the grand and marvelous way that the blessed Lord has framed His creation, and cause him to report throbbingly, "The heavens declare the glory of God, and the firmament sheweth his handiwork."

The symposium has weaknesses too, and they are based on this same fact—that it is a symposium. The various men have very different styles of writing. And some write much more cogently than others. The intrinsic worth of what they

give is variable too, undoubtedly the most valuable piece being the one on archaeology by Dr. MacRae. Many of the others are excellent; a few are disappointing.

The most serious disappointments come in the omission of statements on questions which perennially haunt the Christian student—such questions as the reconciliation of the age of man according to Scripture, the problem of the flood (Was it universal? Particular? If the former, how do we explain the present presence of animals that cannot swim throughout the world? If the latter, how can we account for the Scripture data which say unequivocally that the water covered the mountains? Furthermore, how did Noah get all the animals into the ark? Did he have to put in every species or just representatives?); the details of the problem of the evolution of man from such points of view as the problem of vestigial organs and emergence.

But though these questions are overlooked, many others are considered and brilliantly answered.

And these men know whereof they speak. Each has an earned graduate degree in a scientific field (a requisite of membership in the American Scientific Affiliation) and each stands in a position of leadership both among scientists and among Christians.

Each of these men has combed his field



A Book Review

for evidence that will strengthen the faith of believers and show the weaknesses of arguments against it. What they have found should be of great help to students who fear—and often are told—that they must make a choice between their fidelity to Christ and their fidelity to science.

Dr. Frank Allen, one of the authors, has recently retired as Chairman of the Department of Physics at the University of Manitoba. He is a Fellow of the Royal Society of Canada and a member of the Optical Society of America. He has published about forty papers on vision, hearing, and the other senses in various British and American journals.

Edwin K. Gedney is a specialist in the fields of geology and mineralogy, having his degrees from Brown and Harvard. At present he is on the faculty of the Gordon College of Theology and Missions in Boston.

Dr. R. Laird Harris, Professor of Biblical Exegesis at Faith Theological Seminary, Wilmington, had his early training in chemical engineering and chemistry. He is an associate of the Sigma Xi (research) honorary society and a member of Tau Peta Pi (engineering) and Phi Kappa Phi (scholastic).

George R. Horner was until recently a member of the faculty of Wheaton College (Illinois) in the Department of Anthropology and Archaeology. He has made contributions to a number of periodicals, correlating his field with the Scriptures. At present he is under appointment to the faculty of the Cameroons Christian College in French West Africa.

Dr. Walter E. Lammerts was for a number of years Assistant Professor of Ornamental Horticulture at the University of California in Los Angeles. His interest has centered in genetics, especially in the field of hybridization, and he has published many significant papers in this field. He is now a horticultural consultant, working chiefly with ornamental shrubs, to Manchester Boddy, Rancho del Descanso, near Los Angeles.

Dr. Allan A. MacRae is an outstanding scholar in the field of archaeology. He has his Ph.D. from the University of Pennsylvania, in Oriental Studies, and is co-author of an archaeological reference work. For some years he has been President of Faith Theological Seminary, Wilmington.

For thirty-six years, Peter W. Stoner has been Chairman of the Department of Mathematics and Astronomy at Pasadena City College, California. He is the author of *From Science to Souls*.

Dr. Hawley O. Taylor, recently retired Chairman of the Department of Mathematics, Wheaton College, has published many papers in the field of acoustics and radio communications.

Dr. William J. Tinkle, who has his Ph.D. from Ohio State University in

zoology and botany, has been Chairman of the Department of Biology at Taylor University (Indiana) and is author of a zoology textbook as well as several papers on heredity and biology.

Dr. William R. Vis is a practicing physician in Grand Rapids, Michigan. He has his M.D. from the University of Michigan.

Dr. Roger J. Voskuyl, Professor of Chemistry at Wheaton College, is a member of a number of scientific and honorary societies, and also a contributor to the Manhattan Project in the field of "heavy hydrogen."

The editor of this volume was F. Alton Everest, who was Assistant Professor of Electrical Engineering at Oregon State College prior to his present position as Associate Director of the Moody Institute of Science, Los Angeles.

For future symposia, the scientists might do well to invite competent theologians and apologists to serve as correlating agents. With the exception of Dr. MacRae's article, no systematic attempt is made to show the apologetic value of scientific evidence. The reader must answer for himself such questions as, What is the apologetic worth of knowing these facts of science? and, How does the scientific fact stand related to the total Christian philosophy of life? A chapter on the philosophy of evidence to show that a fact of history is meaningless without a philosophy of history would have given the work a coverage which is now somewhat lacking. Also, a competent theologian might well have screened the manuscripts to eliminate certain indecisions in Hebrew words now seen (cp. pp. 64-65 and p. 131 on the question of whether Genesis 1:2 should have its verb translated *was* or *became*, for example), and to counsel in theological matters such a question as trichotomy.

The total effort of the volume, however, is brilliant. There are plenty of footnote and bibliographical references so that advanced research can be carried on at any desired point of interest. It is hoped that this valuable contribution to the body of contemporary Christian

literature will serve as a stimulation to urge other Christian men of science, to voice their conclusions in print. *Men of science, light your lamps!* END

AMERICAN SCIENTIFIC AFFILIATION

THE A.S.A., as is stated on the official program of the convention, consists of "a group of Christian men of science devoting themselves to the task of reviewing, preparing, and distributing information on the authenticity, historicity, and scientific aspects of the Holy Scriptures in order that the faith of many in Jesus Christ may be firmly established." These men hail from all parts of our country and Canada, and for the most part have earned respected degrees in the various fields of natural science. Many of the members teach in church-related colleges of the conservative type such as Wheaton, Taylor, Goshen, and Shelton college. Some of the science men at Calvin also belong to the affiliation. Dr. J. P. Van Haitsma and Dr. E. Y. Monsma having served as members of the executive council. Other members hold teaching positions in state universities, or are engaged in industry as engineers or research men, while still others are professional men in medicine, dentistry, and psychiatry.

All of the members subscribe to a very conservative doctrinal position and are Bible-believing Christians.

The 1950 convention met on August 29th through September 1st at Goshen College, Goshen, Indiana. It was a real privilege for Dr. Monsma and your reporter to represent the Calvin College contingent of A.S.A. members, and to spend these few days in the company of other scientists who are seriously addressing themselves to the task of correlating the facts of science and the Bible.

No small part in the success of the convention was the unassuming cordiality and kind hospitality of the Goshen College Faculty. Under the chairmanship of Dr. H. Harold Hartzler, and with the aid of Dr. Paul Bender and Dr. Alta E. Schrock, all on the Goshen staff, the Convention moved smoothly to a successful close.

Each day of the convention started with a devotional period of meditation and prayer, after which breakfast was served in the college cafeteria. Two technical sessions per day were

devoted to the reading of scientific papers prepared by various members. All of the papers were designed either to correlate science and Scripture, or to present scientific data which to date seem to defy adequate correlation with the Bible as it is currently interpreted. Thus the perennial problems such as the age of the earth, the antiquity of man, the changes in the earth's crust, the origin of species, and the significance of fossil remains, were raised anew, avidly discussed, but hardly solved. Though there was wide divergence of opinion openly expressed and frankly spoken, the tone of the discussions was consistently considerate and there was a common desire to cling to Scripture as the final authority. All the members are convinced that "there can be no real discrepancies between Biblical statements and scientific observations when both are properly interpreted."

A few of the topics presented for discussion will serve to indicate the general nature of the program: "Methods of Dating the Earth and Universe" was presented by D. N. Eggenberger, M. S., a research chemist for Armour and Co. of Chicago; "Recent South African Fossil Finds" by Marie Fetzer, M.A., Instructor in Anthropology, Wheaton College, Wheaton, Ill.; "The Paleontology of the Horse" by Cordelia Erdman, M.A., Instructor in Geology at Wheaton College; "Hereditry and Fossil Horses" by R. L. Mixter, Ph.D., Chairman of the department of Biology at Wheaton; "Recent Developments in the Carbon 14 Method of Dating Fossils" by J. Laurence Kulp, Ph.D., Lecturer in Geology, Columbia University, New York, N. Y.; "The Guilt Reaction" by John R. Howitt, M.D., Superintendent Ontario Hospital, Ft. William, Ontario; and "Comparative Psychology, or Mice and Men" by Philip B. Marquart, M.D., Associate Professor, Medicine and Psychiatry, Wheaton College.

To review each of these papers for FORUM readers is not within the scope of this report. Suffice to say that the paleontologists and geologists in the group are pretty well convinced that the earth is at least two billion years old and, to correlate their view with Scripture, they are committed to the "long period day" interpretation of Genesis 1. Not all of the members of the Affiliation are ready to accept this view, however, feeling that such a position would lend too much support to the theory of Organic Evolution. So the problem remains.

The last session of the convention was devoted to a round table discussion of the place of the A.S.A. in other science groups. The members were urged to present scientific papers at their professional society meetings, and to publish their works in scientific journals. This would add prestige and give more force to the Christian testimony proceeding from A.S.A. It was also suggested that the Affiliation might be able to cooperate with other Christian groups interested in academic investigation and Biblical truth. In this connection the newly organized Evangelical Theological Society was mentioned. It would seem that cooperation with such a group would be ideal, particularly in the fields of Biblical interpretation, archeology and apologetics.

Meanwhile, the American Scientific Affiliation deserves more active support from the scientifically trained men of Reformed circles. This is a plea for exactly that support from both those engaged in teaching the sciences and those many of us who have earned their doctorates in chemistry, physics, biology, medicine, etc., who are either self-employed or are in industry. Anyone interested in joining this respectable Christian scientific society should send for an application form to the secretary, Dr. Russell L. Mixter, 1006 North President St., Wheaton, Illinois.

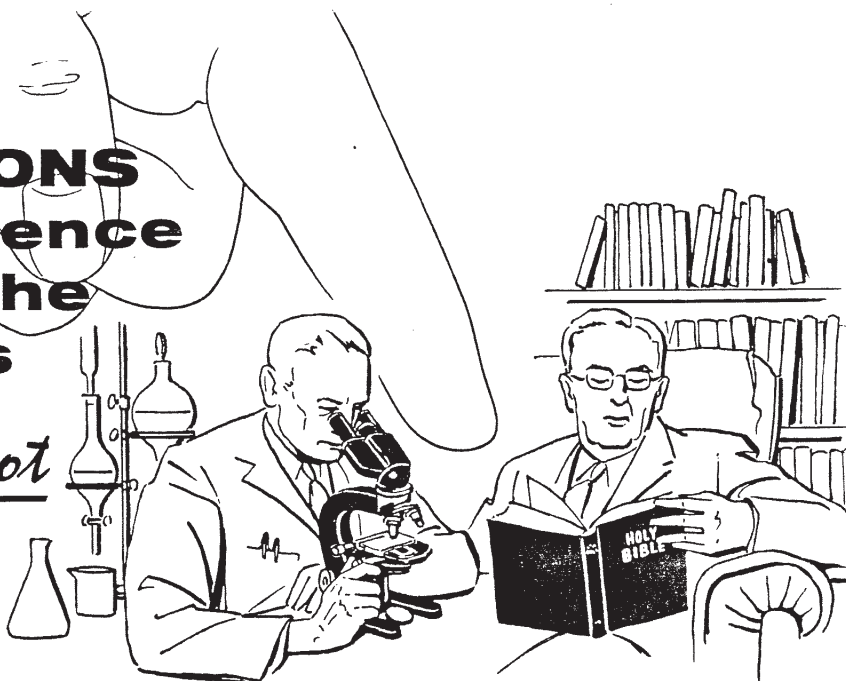
Calvin College.

MARTIN KARSTEN.

GOD'S REVELATIONS in true Science and in the Scriptures

*They do not
clash!*

By RICHARD H. BUBE
Award-Winning Physicist



AFTER GRADUATING SUMMA CUM LAUDE with highest honors in physics at Brown University in 1946, the author received both his M.A. degree in 1948 and his Ph.D. degree two years later at the Graduate College of Princeton University. He joined the Radio Corporation of America Laboratories in Princeton in 1948 as a research physicist and is now a senior member of the technical staff at the David Sarnoff Research Center there. His specialized research has been in the fields of luminescence and photoconductivity of solids. Twice he has been the recipient of the RCA Achievement Award and has authored *Photoconductivity of Solids*, the first comprehensive treatment of that field (1960), as well as *A Textbook of Christian Doctrine* (1955), and more than sixty technical articles. He is listed in *American Men of Science*, and *Who's Who in the East*. Since he represents both Christianity and the scientific realm, the editor feels he is well-qualified to speak on the relationship of the two.

AN ASTRONOMER, peering through a telescope in his lonely observatory, discovers that all of the bodies in the universe appear to be moving further and further apart in every direction. It is as if they had all been formed in a tremendous explosion several billion years ago at one point of origin. A geologist, applying the latest techniques in radioactive dating, finds that minerals he has unearthed from the ground appear to be several hundred million years old. A biochemist, struggling with the problems of viruses and their role in infection, finds

that he can take inanimate chemical compounds which cannot infect or reproduce and from them form viruses which can infect and reproduce. A Christian, in the devotional atmosphere of his library, reads in Genesis that God created the heavens, the earth, and all that is in them.

Such a series of statements, until recently, posed a serious problem of integration for many people. Non-Christians contended that only scientific discoveries are sure and that the Bible should be disregarded. But some Christians insisted that the Bible must always be viewed as scientifically accurate and the apparently clashing evidences from science rejected. Today, such conflict is no longer necessary. In fact, its continuance is essentially indefensible. This is not because the reliability of either science or Scripture can be called into question. Rather, it is because we are beginning to grasp the *difference* between God's revelations.

All of our knowledge about God comes only by His revelations to us, either through the inspired text of the Bible or through the natural phenomena about us. Since God has one harmonious plan, His revelations in Scripture and in nature must agree at any point where there is interaction between the two.

What is God's revelation in nature? One of the New Testament writers, Paul, says, in the first chapter of Romans, verse 20, "For the invisible things of Him are clearly seen, being understood by the things that are made, even His eternal power and Godhood." Nature thus unfolds evidences of His existence and power in four basic ways.

(1) The universe is not eternal but began at some finite time interval in the past. All scientific disciplines point to the *temporal* nature of our universe: astronomy, with its investigation of the expanding universe; physics, with its discovery of the transformation of matter into energy; and

geology, with its use of radioactive decay to date minerals at a definite time in the past. Therefore, a universe which had a beginning calls for a Creator with a power which transcends the limitations of our material creation. The Bible says of this, "In the beginning, God created."

(2) The universe exhibits a basic *law and order* suggesting a Lawgiver who sustains the universe by His power. The very procedures of science are based on the assumption that an orderly universe exists, i.e., that reproducibility and predictability are possible. Without faith in the orderliness of the universe, a scientist could not proceed from one experiment to another, nor describe whole areas of nature in terms of unifying mathematical laws and formulae.

(3) Nature is replete with evidences of a beauty and usefulness of design, thus indicating that the apparent orderliness has a *purpose*. Such purposeful design points back to a Designer who has power to bring His plans to fruition. Among the many examples in nature which suggest a master Designer are: the countless adjustments of the earth which suit it for human life; the unique life-sustaining properties of water which are combined with chemical properties found in no other substance to the same extent; the intricate structures of human and animal bodies; the design in the plant kingdom which is far more complex than anything conceived by man.

(4) Human life is characterized by certain spiritual aspects beyond the realm of science. If fish have gills because they live in the water, and mammals have lungs because they live in the air, why does man have rationality, sense of duty, faith, love, and hope? Such attributes suggest a personal spiritual Source with Whom man may have communion. If man differs from other beings by his reason, emotions, moral judgment, and will, are we not led to conclude that a spiritual Being created him?

Now these natural phenomena are *evidences* of God's existence and power. But we must not confuse evidence with *proof*. One cannot prove from nature that God exists. In order for a person to respond positively to God's revelation, in nature or in Scripture, there must be an enabling intervention of God's grace. Any personal acceptance of and relationship with God must come because of His free grace energizing within the individual.

Having briefly seen what God's revelation is in nature, the question now is, what is His revelation in the Scripture? Here, the revelation has a distinct aim of showing God's personal nature, dealings with men, and salvation through Jesus Christ. It has the central purpose of leading people into a vital experience with and likeness to Christ.

Solid evidences, both internal and external, confirm that God's Biblical revelation, like His natural revelation, is reliable. These include: the unity and progressive unfolding of the Bible's message even though there were forty authors and about 1,500 years during which the sixty-six books were composed; the historically confirmed record of fulfilled prophecies; the verification of specific Biblical descriptions through discoveries with the archeological spade; the beauty of the language; the statements of Christ specifically upholding the authority of the Scriptures; the unusual claims of the writers; and the uniqueness and divinity of the message itself. These and other validations back up the

Scriptures as indeed the revelation of God. But here again, mere intellectual evidence is not enough. The individual realizes true interaction with this revelation and applies its dynamic when he responds to the grace of God which opens his spiritual eyes to see the truth.

It is clear, then, after examining both spheres, that science and Scripture deal with different aspects of life. This does not mean that life should be compartmentalized into two realms, one where science is meaningful and Christianity is not and the other where Christianity is meaningful and science is not. It means that science and Christianity, as the revealing God harmoniously planned them, are both relevant to the whole of existence but that they provide the answers to different questions. To put it simply: science answers *how* and *when*; Christianity answers *who* and *why*.

In comparing the revelation of nature with that of the Scripture, one must recognize that the Bible is not an encyclopedic sourcebook of all knowledge in every realm. But the Bible does fulfill the incredible task of translating the mind of an infinite, holy God into the language understandable to finite and sinful man. In achieving this, the authors have used history, dialogue, story, symbol, picture, poetry, and the like. Apparent conflicts between science and the Bible do not mean that the Bible is wrong. The message that the Scripture conveys is inerrant. Apparent conflicts arise between science and the *traditional interpretation* of the historical significance of the various modes through which God's Bible message is presented. The truths of God's revelation, both in science and in Scripture, must ultimately prove to be consistent. Thus, if the two seem to clash, there is an error at some point in man's interpretation or he does not have enough information available.

Few things have done more to discredit Christianity through the centuries than the rejection of scientific findings in natural phenomena as valid indications of God's revelation. Some have insisted that their own peculiar, rigid *interpretations* of particular disputed Scripture passages be held as absolute scientific fact until long after any conscientious and informed Christian could agree. The Bible was not wrong; the interpretation was. In many instances, when the traditional interpretation could no longer stand, it passed painlessly into oblivion. But often these did not pass without leaving the false impression that science had ruined one more superstitious dogma of Christianity.

But all such difficulties disappear, as they must, when the revelations of God in nature and in Scripture are properly understood, integrated and viewed as friends instead of foes. Then the good news of salvation through Christ is not fettered by traditional interpretations of man, but is complemented by interpretations which acknowledge the valid discoveries of God's added revelations in natural phenomena. Even as natural phenomena proclaim the existence and power of God, so the Scripture goes further and proclaims also the love, justice, mercy, and salvation of God. The full revelation of God becomes meaningful and real in life itself only through a personal relationship with Christ. He is the center of God's Biblical revelation, and the joy of personally knowing God floods the heart only if He is also welcomed as the center of that heart.



Out of the Lab

Donald S. Robertson, Ph.D.
Chairman, Dept. of Science,
Biola Bible College

Nature: science & biblical viewpoints

Many attempts have been made and are being made today at correlating science with the biblical references to nature. More often than not, these attempts fail for two reasons: first, because it is not recognized that science and revelation have two different objectives in view, and second, because science and the Bible speak different languages.

The primary objective of science is the study of natural things. All of nature comes under the scrutiny of the scientist. His goal is to describe nature in understandable terms and to formulate the laws controlling its operation, while the Bible, on the other hand, is primarily concerned with spiritual matters. Through it man learns of God, is instructed in righteous living and is informed of God's plan of salvation through the Lord Jesus Christ.

However, just because the Bible is primarily concerned with spiritual things does not mean that it totally ignores nature. Quite the contrary is true. In order for the Bible to be an adequate revelation from God, it is necessary to make some reference to nature, for after all, man is surrounded by natural things. In fact, to the average man this part of his environment is more real than the spiritual. Thus God included within the Bible sufficient information about nature so that man could correctly orient himself to it. Through the Scriptures, God reveals to man that He is the Creator of all nature and that it is by His power that all things exist. In revealing this the Bible does not portray nature as the scientist does, for it does not pretend to explain the inner operation of nature; it merely assumes that God and His power are sufficient explanation.

As we mentioned above, language differences can also be a source of

misunderstanding. The language of the man in the street is not good enough for the scientist. He has had to coin all types of terms, very precise terms, that have meaning for other scientists but that are all too frequently meaningless to the average man. The Bible, on the other hand, is not written for only the enlightened few but also for the mass of humanity. As a result, it is written in the language of the masses — a type of language that has meaning for everyone. Biblical language describes nature as it appears on the surface and it is not meant to be a scientific description of the principles and laws of nature. For example, we find the Bible referring to the sun setting and rising. This is the language of the average man. Since the Bible was for such a man, one would expect this kind of language. However, such language is not anti-scientific, it is non-scientific. It is a language that even the scientist uses in his everyday life.

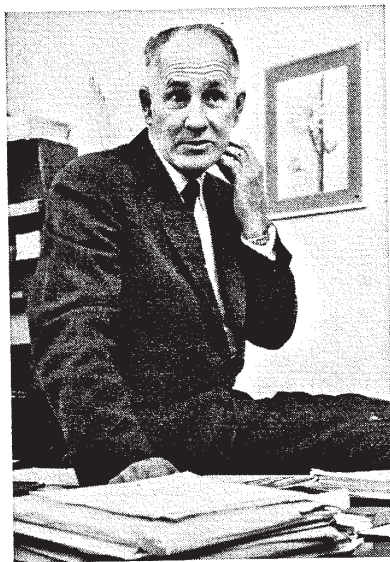
Now since the Bible is not concerned with the fundamental laws and processes of nature as the scientist is, and since where it does touch on nature, it uses popular language rather than scientific, it becomes very difficult to correlate the two. Because of these differences, one is forced to interpret the Scripture's descriptions of nature in the light of modern science. But since science at no time knows all there is to know about nature, such interpretations cannot be static things. They must be made with the understanding that new evidence from the scientist might necessitate re-evaluation of older interpretations of scriptural truth; not because the Word of God is not accurate but because it is a complete revelation whereas the scientist's information is only partial. **END.**

Faith that is sure of itself is not faith; faith that is sure of God is the only faith there is. — Oswald Chambers

RELIGION

Faith & the Scientist

"I see no conflict between science and religion," Geneticist George Beadle told a gathering of Christian laymen in Chicago recently. "The answer to the question of creation still remains in the realm of faith. In early Biblical times . . . it was believed as a matter of faith that man was created as man. Since then, science has led us back through a sequence of evolutionary events in such a way that there is no logical place to stop . . . until we come to a primeval universe made of hydrogen. But then we ask, 'Whence came the hydrogen?' and



LARRY BURROWS

BIOLOGIST BEADLE
The God of science has retired.

science has no answer. Is it any less awe-inspiring to conceive of a universe created of hydrogen with the capacity to evolve into man than it is to accept the creation of man as man? I believe not."

This credo, from a top scientist who is also president of the University of Chicago, illuminates the new terrain of the conflict between science and religion. Last week *TIME* correspondents sampled scientific and theological opinion all over the U.S. to find the borders of the terrain.

After Darwin, Doubt. In the aftermath of Darwin, scientists grew increasingly confident that their questioning disciplines could eventually supply all answers, and were increasingly contemptuous of *Genesis* and all other parts of the Bible that conflict with science's discoveries. After World War II, when science capped humanity's plight with the hydrogen bomb, some scientists joined the nation's postwar religious revival. But eventually, though the churches had by then conceded much to science, many of the converts found them still too laden with ceremony and dogmatism for the scientific taste.

Beadle's statement implies that God set

the universe in motion and then "retired," and this is an idea now much favored by scientific believers. Many, accepting this hydrogen-God, go on perforce to reject the person-God of Christianity. Beadle's credo thus seems to be central in the new terrain, though scientists' beliefs spread both ways in a wide spectrum from atheism to total faith.

An Ordered Universe. In the postwar technological explosion, scientists have seen trusted "laws of nature" replaced by subtler hypotheses, discovered that the more they know, the more remains to be learned. "Scientists are not as cocksure as they used to be," says Botanist Edmund Sinnott, former dean of Yale's Graduate School. They have come to show greater respect for the kind of questions that religion—although not necessarily the Christian church—asks. "Most of the scientists I know," says Boston University Theologian Edwin Booth, "believe in the immanent principle of life in the organic universe. If they are religious, they call it God. If they are not religious, they have awe and reverence for this principle. But it isn't retired, nor is it personal. It is greater than personal—it is absolutely essential to the principle of life itself."

By far the majority of scientists and technicians interviewed by *TIME* agree on belief in an ordered universe. "I feel increasingly impressed," says one Princeton physicist, "by the great miracle that the world, so to say, exists. Its irregularities are as mysterious as its regularities." Microbiologist Seymour Hutner agrees that the day of scientific materialism has passed. "All good scientists stand in awe and wonder at creation," he says. "Only matter-of-fact scientists who are either inarticulate or brute mechanics might not have this sense of awe."

Useful Ethics. For some scientists this new sense of awe increases their love and understanding of the God spoken of in the Bible. "I see no conflict," says Biochemist Robert Smillie, a Roman Catholic, "between believing in a personal God and investigating a scientific fact." Others find that they can easily belong to churches only if technical questions about God and the nature of the universe are mentally put aside. Admits Theologian Booth: "If many scientists were asked to give affirmation of their belief in the Creed, they would have to leave the church." Religion, for many of them, becomes primarily a matter of being neighborly, providing good examples for children, or subscribing to a code of useful ethics. To James R. Dempsey, president of General Dynamics Astronautics, religion is primarily a matter of living up to the Golden Rule. "If this isn't enough," he says, "then I'm not going to make it."

Scientists who get concerned with theological problems resent the lack of interest by the clergy in trying to adapt the verbal expression of dogma to changing times. Caltech Physicist Richard Feynman argues that theologians should redefine the body

of church doctrine—not to make it compatible with scientists' understanding of the universe, but to allow room for scientific discoveries. Many scientists feel drawn to such denominations as the Unitarian Universalist Association, which has virtually no creedal requirements. Chemist Linus Pauling, who this week is joining the Unitarian Universalists, says, "I have not found the concept of God a necessary idea as a scientist or as a man."

Religion's Self-Criticism. In the long run, most theologians believe that there will prove to be no irreconcilable conflict between the discoveries of the laboratory or telescope and the revelation of God. But scientists are convinced that religion will have to undergo a vast intellectual change, to rid itself of dogmatic expressions that are no longer tenable in light of scientific progress. Says Dr. James Van Ness, professor of electrical engineering at Northwestern University: "Any time religious beliefs come in conflict with the things we learn about the world, we must modify the beliefs."

Yet religion's self-criticism has at least begun, and some scientists share churchmen's approval of the pioneering theological speculations of Paul Tillich and the late French Jesuit Pierre Teilhard de Chardin. Scientists also feel that they themselves have done more to bridge the chasm of belief than the clergymen have, and Boston Theologian Booth agrees. "We are now," he says, "in the examinational and destructional phase of the evolution of Western culture. But this is not discouraging, for we know that our grandchildren will have achieved the bigger view."

Lutheran Concord

In the past 75 years, the number of Lutheran church groups in the U.S. has been reduced by merger from about 60 to a more or less manageable 14. By fall there will be only ten—and the prospects are strong that even more unity is in the offing.

- In Minneapolis a fortnight ago, delegates to the annual convention of the Lutheran Free Church (membership: 90,000, largely Norwegian-Americans) voted 530 to 112 for merger with the big (2,365,000) American Lutheran Church—itsself the product of an earlier alliance of three smaller churches. Dr. John Stensvaag, the Free Church's president, says that it can no longer afford the luxury of remaining a splinter group if it is "to go forward worthily in a manner good for the Kingdom." The American Lutheran Church will vote on the Free Church's application for membership at its own convention in October, probably will dispense with a ballot to approve the merger by acclamation.

- In Detroit's grandiose Cobo Hall this week, four Lutheran bodies—the United Lutheran Church in America (2,500,000), the Augustana Evangelical Lutheran Church (630,000), the Finnish Evangelical Lutheran Church (36,000) and the American Evangelical Lutheran Church (25,000)—will simultaneously hold their final conventions as separate bodies. Next



LUTHERAN HARMS

Getting on the same side of the table.

morning, the 6,000 delegates and visitors will go back to Cobo Hall for the first Holy Communion service as members of the nation's newest and largest Lutheran body: the Lutheran Church in America. "Unless and until Lutherans are sitting on the same side of the table in interdenominational conversations," says Dr. Malvin Lundeen, who is the chairman of the unity commission that brought the four churches together, "the Lutheran contribution to the ecumenical movement will be seriously compromised."

• For years, the biggest barrier to serious discussions of Lutheran unity has been the independent stand of the doctrinally conservative, fast growing (2,500,000 members) Lutheran Church—Missouri Synod. Historically wary of cooperating with church groups that do not share its theological views, the Missouri Synod has never joined the National Lutheran Council—the service organization that coordinates such matters as public relations, welfare and mission activities for most of the nation's other Lutheran groups.

Now, says the Missouri Synod's executive director, Dr. Walter Wolbrecht, "we want to see what church work the several bodies can do together better than they can do separately." Last week, at its annual convention in Cleveland, the Missouri Synod adopted a resolution that proposed an international synodical conference "designed to embrace all Lutheran bodies." To succeed its president of the last 27 years, Dr. John Behnken, 78, the synod elected Dr. Oliver Harms, 60, of St. Louis, the church's first vice president for the last three years. Says Lutheran Harms: "We shall continue conversations with as many Lutheran church bodies as we can, firm in our testimony and praying that God will bring church bodies under the confessions and Word of God into one."

TIME JUNE 30 1962

God & the Scientist

Sir:

Re the article on faith and the scientist [June 29]: there is an unwarranted assumption that science deals in faithless fact and that religion traffics in factless faith. The quote from Dr. Van Ness sums it up perfectly: "Any time religious *beliefs* come into conflict with the things we *learn* about the world, we must modify the beliefs." Any number of the scientific concepts we accept today may be simply convenient schemata that impose order upon the experiences we have collected so far. They may have little or no relation to "reality."

The suspicion has been growing among many scholars during the past few decades that we are not so much "discovering" our scientific theories as we are "inventing" them.

A theory is thus neither true nor false; it simply works or it doesn't. Now it is true that many scientists (including myself) *believe* that their theories closely approximate or correspond to "reality," but this is an act of faith, for no "proof" can be adduced for or against it. Scientific beliefs can conflict with religious beliefs, but the large number of modified or even discarded scientific theories should serve as a useful warning relating to Dr. Van Ness's pronouncement. We should be very careful about junking our deep, personal religious commitments because of certain presently held schemes that we are attempting to apply to the natural world, however useful they may be at the moment.

GEORGE K. SCHWEITZER

Professor of Chemistry
The University of Tennessee
Knoxville, Tenn.

2 TIME July 18, 1962

After defining his terms, this Wheaton scientist probes three characteristics of a Christian intellectual.

The Christian Intellectual

By DR. JAMES H. KRAAKEVIK '48

SOME TIME AGO one of Wheaton's faculty was queried, "You are a respected and successful scientist. How do you square this with teaching at a fundamentalist college like Wheaton." The first reaction was, "My how complimentary," whether true or not. The fragrance of flattery was refreshing to the ego. But then the impact of the question hit him and angry reaction welled up within and self-control reigned with difficulty. For paraphrased it meant, "What kind of an intellectual schizophrenic are you?" How can one hold to the basic truths of God and the Bible and still be an intellectual person?

There is little doubt that this question has at some time or other bothered many. There seems to be an obvious dichotomy between the beliefs and practices of many professing Christians. But let us assume that we are no longer forced to choose between being a hypocritical believer and a professional honest doubter but have come to realize that God accepts us all as we are and is in the process of making us in the divine image.

Yes, we have examined the basis of Christian doctrine, sometimes from a hostile perspective, and have thought seriously about concepts and issues in our own disciplines, and have occasionally found them immiscible. Some having passed this way have either forsaken their Christian faith for intellectualism, or else stifled the searching of their minds in a suspended passivity. One can thus trade this pair of internal forces for some other tensions in a fruitless attempt to avoid the issue.

But the intelligent Christian recognizes that Biblical truth, though reasonable and rational, is open-ended heavenward and can never be reduced to a closed consistent philosophical system; and that human knowledge in spite of recent exponential growth, still is severely limited. No, we are not forced to choose between trading off our faith in-order to pursue intellect-

ual activity honestly, or abdicating the mind in order to love and serve God. Therefore, believing that it is not a contradiction, let us consider the Christian intellectual.

Now the word *intellectual* has some unhappy connotations. Perhaps it is something like the problem Billy Graham once faced when asked if he were a *fundamentalist*. His reply was "If you mean bigoted, narrow, obscurantist, anti-progressive, then I am not. But if you mean, holding to the basic teachings of the Bible historically held by the church, then the answer is yes." We prefer the term evangelical to attempt the distinction. Similarly, if *intellectual* means egotistical, obscure, unable or unwilling to communicate, uninvolved, then let us strive elsewhere. But if it means creative, imaginative, productive, stimulating, concerned, and articulate—then let us desire it, as Solomon says we should crave knowledge and wisdom. I perceive the Christian intellectual to be not an intelligent person who happens to be a Christian, but a committed Christian who happens to have and to use his God-given mental abilities.

There are *demands* on one who would develop and use an incisive mind. There must be the discipline of learning the tools of his intellectual trade, recognizing with Milton that "A little knowledge is a dangerous thing, drink deep or taste not the Perea spring." With humility we observe that the explosion of human knowledge, growing as a sphere, which in science doubles every decade, only exposes the frontiers of ignorance, which increases as the radius squared. One must recognize the principle of Christian stewardship and invest one's own life in a strategic way.

There are *dangers* to the one who seriously develops his intellect. The process can become an end in itself. One can become a professional student, without sensing the obligation to use one's knowledge to the glory of God. One can become so enamored with thinking, as even God Himself has told us to do in Philippians 4, those thoughts which are true, honest, just, pure, lovely, that we fail to translate noble thoughts into deeds. In Ephesians 2 we read that sin is the "fulfilling the desires of the flesh, and of the mind," and we can easily fall prey to either.

Let us consider three characteristics of a Christian intellectual. **First I believe he is a liberal person.** By this we do not mean his views on politics or economics. He may or may not be liberal there. But he is a person who is broadly educated, open to new ideas, creative, imaginative. He is objective and fair, unbiased, or perhaps at best, recognizing his own biases and trying to compensate for them. There is a graciousness and considerateness of others in his demeanor. He is generous with his ideas, his energy, his time, and himself. He is liberal because he is liberated from himself to be and to do what God best enables him. A truly liberal person will not in his zest for free expression forcibly restrain the



Before returning to Nigeria this summer for a second term under Sudan Interior Mission as a teacher in Titcombe College, Dr. James Kraakevik served a year as chairman of the department of physics at Wheaton. His first term began in 1964 on a leave of absence after being named junior teacher of the year in '64. Dr. Kraakevik earned his PhD at the University of Maryland and has spent several years in research at the U.S. Naval Research Laboratory. He has also participated in several international conferences in his specialty of geophysics. Kraakevik is a member of the American Geophysics Union, American Meteorological Society, Sigma Xi and Scientific Research Association of America. The Kraakeviks have five sons.

free expression of another. The Christian has an obligation to use his mind to analyze, criticize, and challenge to positive action. But as Elton Trueblood has said, we seem to be an *orphan* generation, having lost our historical perspective. We have become enamored with our own age in promiscuous criticism of our heritage, but laying no foundations for our successors. We must recognize that the purpose of God moves like a mighty river and we can either move with the current or get out of its way. We cannot stop it. I have stood on the banks of the Niger in West Africa and watched the great river flow by. With my sons and two others we also tried to row a small boat upstream against the current of over 5 knots. But two strong men made little progress, and pausing for breath we slipped back to the starting point. We succeeded only in breaking our oars. So it is with those who try to run counter to the purposes of a sovereign God.

Secondly, the truly Christian intellectual must be spiritual. Now I mean this in a Biblical sense, a wholesome sense, not as an other-worldly affectation. The Bible reminds us of the brevity of life in innumerable forms. James says it is a vapor that appears for a moment and is gone. Moses says it is a tale that is told. Isaiah says it is like mown grass, a shepherd's tent, a weaver's shuttle, and so on. If we reduce time by a factor of 2 billion, we get on a cosmic time scale, where the earth has been here for about 2½ years, man an hour or less, Christ lived 30 seconds ago, and our lifetime is but a second. The Christian recognizes a spiritual dimension to life, which is beyond the four dimensions of space and time, but no less real. Paul writes to the Philippians, "And this I pray, that your love may abound yet more and more, in knowledge and in all judgment, that you may approve things that are excellent." To Paul, abounding love was not incompatible with broad knowledge and keen judgment. And this leads to a willful choice of the excellent—the best, not merely the good or the better. In I Corinthians he says that of more importance than spiritual gifts was love—the more excellent way. And Paul was a true intellectual.

Now a spiritual person is one who is naturally spiritual—under the control of and sensitive to the Spirit of God. In I Corinthians 2 the apostle characterizes the spiritual man as one who judges all things, yet he Himself is judged of no man, and he has the mind of Christ. In this passage the analogy is made between human knowledge, which comes through the senses and the mind, and knowledge of God and His mysterious ways, which comes through the Spirit of God. A person without the Spirit has no access to this realm of knowledge, like the student who has read widely but not studied mathematics cannot read the *Journal of Mathematical Physics*. He that is spiritual has keen discernment, he is an enigma to others, and he has the mind of Christ, who is the repository of wisdom and knowledge. The Christian who seeks to develop his mind to maturity must include this dimension of the spiritual, or cease to be truly Christian.

Thirdly, the Christian intellectual must be active. Most of us go through a period of critical self-searching to find a personal faith that works. But all the time we have the strange feeling that Christ was searching for us until we noticed *Him*. We must move on from con-

templation to commitment. Samuel Johnson wrote, "Life is not long, and too much of it must not pass in idle contemplation how it shall be spent." We justify our lack of involvement by saying we are preparing. But today we do not want apologies for the Christian faith. It needs to be proclaimed and lived by men and women of conviction—with keen minds, sturdy hearts, and willing hands. It is not enough to climb into the pit of despair and console modern man in his existential dilemma. We must take the cover off, let the light in, and giving him a hand, help him out. We need to be reminded of the dignity of labor and be willing to get our hands dirty in Christ's work here on earth. It is noteworthy that our Lord was a carpenter—and he didn't publish any books.

I have been impressed with the accounts Wheaton students have given of their ministry in the inner city. Others have found an outreach through student mission projects and have returned with a new perspective of the problems and the opportunities for Christian witness in the world. Still others have served in various capacities of helpfulness to others and witness to our Lord.

We ourselves have served three years in Nigeria. As you have read in news magazines, you will recall that this country was the hope of Africa. Some 60 million people in an area the size of Texas and Oklahoma, half of them teenagers or younger, yet now, torn by inter-tribal strife, it is in danger of fragmenting. Thousands have been killed, hundreds of thousands displaced.

When we came to Nigeria several years ago, we began to be impressed with it as a land of contrasts. The multi-engine jet aircraft, having flown from Europe landed at the Kano Airport, and greeting us beside the runway was a row of camels with Muslim mallams sitting upon them in ornate robes. Other contrasts we see in the cities are a woman with a baby wrapped around her back carrying a heavy log on her head. Or we might see a man riding a bicycle down the street, balancing a bed spring on his head, while cars and trucks pass by him.

The Lord gave us the privilege of working with some of these young people at Titcombe College where 360 students attend, ranging from 14 to 21 years old. They come extremely unsophisticated and it is exciting to see the way their minds are stimulated and developed . . . to see the way the Spirit of God moves in a culture which was originally inhospitable to anything of this nature, where ritual killings take place even yet and where many people are bound in superstition. Some of our students come from homes where they worship Shango, the god of thunder, and we tell them although they have learned by tradition they are to obey certain laws related to thunder storms because Shango would get angry, when they learn that the laws of electro-statics tell them to obey the same rules, they realize there are scientific reason for it. And we have the many opportunities in our home to discuss issues that pertain to their own Christian lives, as well as those in the Bible.

These are some of the opportunities to serve Christ today. May we be challenged to be true intellectuals, ones who are liberal, spiritual and who translate noble thoughts into noble deeds for the glory of God. ■

This article was adapted from a talk given by the author at a meeting of the Wheaton chapter of the Scholastic Honor Society.

Wheaton Alumni

"If God had wanted us to have nuclear energy,
he would have made atoms."

C. Stephen Board

CHRISTIANS IN SCIENCE

1979

From Stanford to MIT, scientists have gathered this summer to cope with the relation of Christianity to modern technology, with special concern voiced about nuclear energy and warfare.

The MIT gathering attracted over 300 scientists and theologians for a two week study in July under the heading "Faith, Science, and the Future," sponsored by the World Council of Churches. Formal resolutions at the conclusion of the conference reflected the guilt and fear of the leading speakers: guilt over the ravishing effects of technology, including weaponry, and fear over the prospects of World War III, which was predicted by some of the speakers with a dogmatic certainty not found in theological statements in WCC circles.

At Stanford, the annual convention of the American Scientific Affiliation was likewise serious about the current crisis, but showed a sturdier grasp of Providence. Energy, not bombs, was on the front burner for the 220 evangelical scientists; and fellowship more than formal pronouncements characterized the purpose of the August meeting.

The ASA began in 1941, the first of the Christian professional organizations, growing to a present membership of just under 3000. Members must have a graduate science degree and accept a modest doctrinal statement that includes confidence in the legitimacy of scientific knowledge and a belief in the Bible as "the only unerring guide of faith and conduct."

Inevitably the ASA has been drawn into the controversy over creation and evolution (in its earlier years some would say it was dominated by the controversy). Since no official stand has eliminated evolutionists from its ranks, a division took place in 1963 leading to the formation of the Creation Research Society, a strictly anti-evolutionist group. One ASA member who is a member of both organizations summed up the difference as, "We (ASA) study evolution and they're against it."

Various forms of theistic evolution are tolerated in the ASA and frequently find expression in the quarterly *Journal of the ASA*. A survey is presently circulating from member James Buswell, a Wheaton College anthropologist, to determine the strength of various views in ASA ranks.

The Creation Research Society, with headquarters now in Ann Arbor, tends to follow the views of Henry Morris and Duane Gish of San Diego in their emphasis on a "young" earth (only as much as ten to twenty thousand years old) and a strict seven (24 hour) day scheme of creation. Their ranks now number about the same as the ASA, though membership requirements are not comparable.

The public influence of the CRS has been widely felt through the debates of Henry Morris and popular teaching in the Christian media. ASA members privately wring their hands over the influence of what they consider either faulty science or a closed-shop forum on options for interpreting Genesis. "They make their science their religion," a North Dakota State U. zoologist remarks. "Duane Gish is always talking about the 'creation model' versus the 'evolution model.' But I ask, 'Which model of creation do you mean?'"

Illustrating the grass-roots popularity of the anti-evolutionism of the CRS was the August convention of the Bible-Science Association in Anaheim, California. It attracted about a thousand lay people to hear speakers drawn largely from the CRS camp.

The ASA meeting at Stanford turned first to the problems of nuclear energy, drawing on such members as David Willis, a radiation biologist at Oregon State, and Joel Cannon, a nuclear engineer in Idaho. These and other speakers lamented the sloganizing and emotionalism that had obscured the validity of nuclear energy in public dialogue. The risks, it was frequently noted, for nuclear were better than for other forms of power, such as coal. Willis recalled he had been approached by an Oregon group to oppose a Columbia River nuclear project because of radioactive wastes put in the river. But when he heard the amounts involved, he noted that "I put more than that down my laboratory drain."

There was little vocal opposition to this confidently pro-nuclear outlook, but all sides at the ASA meeting agreed that the political reality reduced atomic power's chances for the immediate future. Instead a modest reliance on nuclear plus a stronger confidence in coal could be expected for the next twenty years: nuclear is too expensive and too disliked to figure prominently in the North American energy picture.

Dispite the opinion of Richard Bube, *ASA Journal* editor and Stanford prof presently researching solar cells, that probably earth was not intended to support our lifestyle, no one expects North Americans to voluntarily gear down their consumption in the face of imminent shortages. Political scientist Stanley Moore of Pepperdine U. offered no prospect for a strategic shift in national policy, given our existing short-sighted political system. Materials scientist Jack Swearingen soberly listed the significant metals necessary for energy with the dates of critical shortages--all within 30 years. "If there isn't a war over oil, there will be one over minerals." Southern Africa, he noted, had all the cobalt and chrome. That region will match OPEC for international leverage.

Even though the convention agreed with one speaker who said "we have no reason to believe the right energy technology will arrive just when we need it," the apocalyptic outlook was offset by a solar engineer, Ken Touryan of Colorado, who reported some innovations in developing countries for sun power.

In other topics, the ASA this year took up the research in teaching language to chimpanzees, including the widely-publicized experiments on the Stanford campus. Some of the traditional uniqueness of human beings seems to be shared with animals; lacking is a sense of reverence toward a God and an ethical sense. Brooks Alexander, of the Spiritual Counterfeits Project in Berkeley, reported the effort of occult and Eastern advocates to co-opt science, notably in the holistic health movement, psychology and TM. An earlier speaker by contrast, predicted that Christianity had an inside edge in the technological challenges of the future, because of its openness to experimentation, unlike the East. "The skids to the future are greased for Christianity by science," it was declared, observing that the 38 million test animals new in U.S. laboratories would never be tolerated by Eastern world views.

These three conferences display three uses of science by Christians: 1) science to confirm Scripture, (CRS and BSA); 2) science as a means to ethical or ideological vision (WCC); 3) a blend of the two in a middle way (ASA).

Mr. Board is executive editor of *Eternity* magazine.

Editor William J. Petersen
Associate Editors Russell T. Hitt
George C. Fuller

Evangelical Newsletter (USPS 997160) is published biweekly by Evangelical Ministries Inc. a nonprofit corporation, 1716 Spruce St., Philadelphia, PA 19103, phone 215/546-3696. Second class postage paid Philadelphia. © 1979 Evangelical Ministries Inc. All rights reserved. Subscriptions \$12 per year in the USA. \$14 per year elsewhere, prepaid in U.S. currency only

American Scientific Affiliation Membership

Year	Members	Assoc.	Fellows	Others	Total	Source
1941	5				5	Orig. Council
1943	34				34	Dir. Nov. 1943
1944	43				43	Dir. Aug. 1944
1948	73				73	Dir. Aug. 1948
1949	94				94	Dir. 27 May 49
1950	134				134	Dir. Nov. 1950
1951	206				206	Dir. 15 Aug 51
1952	310				310	Dir. Apr. 1952
1953	498		36		534	Dir. 1 Dec 53
1956					694	Suppl. JASA 8, 4
1961	603	121	82		806	Dir. Nov. 1943
1963	909	180	83	8	1,172	News:5, 3 May 63
1964	953	225	94	8	1,276	News:8, 3 Aug 64
1965	1,029	205	104	2	1,339	Dir. Feb. 1965
1966	1,129	210	119	8	1,461	
1967	1,239	244	120	8	1,603	News:9, 4 Nov 67
1968	1,235	252	135	8	1,622	News:10, 2 Apr 68
1972	1,341	229	133	6	1,706	Dir. Apr. 1972
1973					1,929	Ex. Council 8/74
1974					2,169	Dir. 1 Aug 74
1975					2,401	Ex. Council 3/75
1976	1,764	529	1153		2,446	Ex. Council 3/76
1977					2,683	Ex. Council 11/77
1978	1,946	580	170		2,696	Ex. Council 3/78
1979						***FIRE***
1981	1,272	500	175		2,571	Ex. Council 12/81
1983	1,383	306	187	637	2,506*	Dir. 1983
1985	1,290	218	194	402	2,100*	Dir. 1985

*includes CSCA

NUMBER OF LOCAL SECTION MEETINGS 1960–1984

Section	1960– 1964	1965– 1969	1970– 1974	1975– 1979	1980– 1984
California,					
Los Angeles	9	13	4	—	1
San Francisco	2	5	20	18	18
San Diego	—	1	1	3	7
Central	—	—	1	1	—
Chicago	2	—	—	2	—
Delaware,					
Northern	2	—	—	2	—
Valley	—	—	—	2	—
Gulf-Southwest (Southwestern)	—	—	3	1	—
Indiana	3	3	3	6	1
Michigan: (Grand Rapids)	2	3	3	2	3
(Western)					
(Western Lower)					
New York,					
Western	4	7	9	4	—
Metropolitan	4	8	11	7	9
North Carolina	—	—	2	—	—
North Central	10	6	4	1	—
New England: (Northeastern)	5	5	3	2	2
Oregon	—	1	9	5	1
Pennsylvania, Central	—	2	—	—	—
Washington–Baltimore	3	1	—	8	10
Totals	46	58	79	64	57
Avg/yr	9.2	11.6	15.8	12.8	11.4

**SUBJECT CATEGORIES OF
LOCAL SECTION MEETINGS
1960–1984**

Subject	1960– 1964	1965– 1969	1970– 1974	1975– 1979	1980– 1984
Anthropology	2	1	3	3	—
Apologetics	2	3	2	1	1
Archeology	2	5	20	18	18
Astronomy	1	4	1	3	1
Biology	6	2	2	—	—
Chem-Biochem	1	7	7	6	21
Cosmology/Cosmogony	—	—	—	1	5
Creation/Evolution	14	8	12	12	4
Devotional	4	7	4	6	1
Education	7	4	5	—	5
Environment	—	7	22	6	2
Ethics	6	5	5	4	4
Exegesis/Biblical	4	6	3	9	2
Geology	3	—	2	—	2
Linguistics	1	1	—	—	—
Mathematics	3	1	—	—	—
Medicine	1	3	4	4	8
Missions	7	3	8	1	4
ASA Affairs	1	6	8	6	4
Origins	3	3	2	2	2
Paleontology	—	—	—	—	—
Philosophy	5	4	13	1	3
Physics	4	5	1	6	5
Science	5	10	10	5	10
Social Sciences	23	30	29	30	13
Theology	6	11	10	4	7
Arts	—	1	3	1	—
Totals	113	134	156	113	106

Conventions of the American Scientific Affiliation

#	Year	Date	Venue
1	1946	28–30 Aug	Wheaton College, Wheaton, IL
2	1947	27–29 Aug	Taylor University, Upland, IN
3	1948	1–3 Sept	Calvin College, Grand Rapids, MI
4	1949	22–26 Aug	Bible Institute of Los Angeles, CA
5	1950	29 Aug–1 Sept	Goshen College, Goshen, IN
6	1951	28–31 Aug	Shelton College, New York, NY
7	1952	26–29 Aug	Wheaton College Science Station, Rapid City, SD
8	1953	1–3 Sept	Grace Theological Seminary, Winona Lake, IN
9	1954	24–27 Aug	Eastern Mennonite College, Harrisonburg, VA
	1955	21–24 June	Joint ASA/ETS Grace Theological Seminary
10	1955	23–26 Aug	Star Ranch, Colorado Springs, CO
11	1956	21–24 Aug	Wheaton College, Wheaton, IL
12	1957	26–28 Aug	Gordon College, Beverly Farms, MA
13	1958		Iowa State University, Iowa City, IA
14	1959	9–12 June	Joint ASA/ETS, Trinity College and Seminary, Chicago, IL
15	1960	22–26 Aug	Seattle Pacific College, Seattle, WA
	1961	14–16 June	Joint ASA/ETS, Wheaton College, Wheaton, IL
16	1961	21–25 Aug	Houghton College, Houghton, NY
17	1962	21–24 Aug	Bethel College, St. Paul, MN
	1963	19–21 June	Joint ASA/ETS, Asbury College, Wilmore, KY
18	1963	19–23 Aug	Westmont College, Santa Barbara, CA
19	1964	24–27 Aug	John Brown University, Siloam Springs, AK
	1965	17–26 July	International Conference on Science and Christian Faith, sponsored by Research Scientists' Christian Fellowship, Regents Park College, Oxford University
20	1965	23–27 Aug	Joint IVCF/ASA, The King's College, Briarcliff Manor, NY
21	1966	22–26 Aug	North Park College, Chicago, IL
22	1967	28–31 Aug	Stanford University, Stanford, CA
	1968	16–28 June	ASA/ETS Biennial, Jerusalem, Israel
23	1968	20–23 Aug	Calvin College, Grand Rapids, MI

Appendix 24

#	Year	Date	Venue
24	1969	18–21 Aug	Gordon College, Wenham, MA
25	1970	17–20 Aug	Bethel College, St. Paul, MN
26	1971	17–24 Aug	Whitworth College, Spokane, WA
27	1972	21–24 Aug	York University, Downsview, Ontario
28	1973	20–23 Aug	Geneva College, Beaver Falls, PA
29	1974	19–22 Aug	Bethany Nazarene College, Bethany, OK
30	1975	15–18 Aug	Univ. of California, San Diego, CA
31	1976	20–23 Aug	Wheaton College, Wheaton, IL
32	1977	12–15 Aug	Nyack College, Nyack, NY
33	1978	11–14 Aug	Hope College, Holland, MI
34	1979	10–13 Aug	Stanford University, Stanford, CA
35	1980	8–11 Aug	Taylor University, Upland, IN
36	1981	14–17 Aug	Eastern College, St. Davids, PA
37	1982	13–16 Aug	Calvin College, Grand Rapids, MI
38	1983	5–8 Aug	George Fox College, Newberg, OR
39	1984	3–6 Aug	Miami University, Oxford, OH
40	1985	26–29 July	International Conference, “Christian Faith and Science in Society,” jointly with Research Scientists’ Christian Fellowship, St. Catherine’s College,? Oxford University

PROGRAM

For The

First Nationwide Convention

**THE AMERICAN SCIENTIFIC
AFFILIATION**

of

Wheaton College

Wheaton, Illinois

August 28, 29, and 30, 1946



A group of Christian scientific men devoting themselves to the task of reviewing, preparing, and distributing information on the authenticity, historicity, and scientific aspects of the Holy Scriptures in order that the faith of many in Jesus Christ may be firmly established.



*That they may see
and know,
and consider,
and understand together
that the hand of the Lord hath done this,
and the Holy one of Israel hath created it.—Isaiah 41:20.*

Members of the Executive Council

- F. Alton Everest (1946)*, *President*
 Allan A. MacRae (1950), *Vice-President*
 Marion D. Barnes (1947), *Secretary-Treasurer*
 Edwin Y. Monsma (1948)
 Russell L. Mixter (1949)

Past Council Members

- John P. Van Haitzma (1942)
 Irving A. Cowperthwaite (1943)
 Russell D. Sturgis (1944)
 Peter W. Stoner (1945)

Convention Committees

- Russell L. Mixter, *General Chairman*
 Hawley O. Taylor, *Local Committee*
 Clarence L. Nystrom, *Local Committee*
 F. Alton Everest, *Program Committee*
 Edwin Y. Monsma, *Program Committee*
 William J. Tinkle, *Program Committee*

(* Denotes year of retirement from the council)

Convention Details

Transportation:

Wheaton may be reached from Chicago by a 50-minute ride on the Chicago, Aurora, and Elgin R. R., trains leaving Chicago at 30-minute intervals. The fare is 60c.

Housing:

Rooms are available at \$1.00 per night. Sheets, towels, and blankets are provided. Prices of meals vary from approximately 40c to 75c. Accommodations are available for wives, also.

Reservations:

It is very desirable that room reservations be made in advance. These may be made by writing to Mrs. Ethel B. Patterson, Wheaton College.

Registration:

Admission to the daytime sessions of the convention is contingent upon registration. A fee of \$1.00 will be payable at the time of registration.

Non-Members:

Those who are not members of the ASA, but who are interested in its work, are cordially invited to attend the sessions after they have registered properly.

Participation in absentia:

Those members unable to attend are invited to submit papers to be read, discussions pertaining to the abstracts contained in this program, or communications on any matter of ASA program or policy. These will be presented and considered at the appropriate time. Any such material should be sent to the convention chairman, Dr. Russell L. Mixter, Wheaton College, Wheaton, Illinois, immediately.

Wednesday, August 28, 1946

- 7:30 a.m. **Devotional Period:** Leader, Prof. Paul De Koning
- 8:00 a.m. **Breakfast**
- 9:00 a.m. **General Session:** Opening of the convention. Discussion of the program by Dr. Russell L. Mixter, Convention Chairman
- 10:30 a.m. **Papers:** Dr. Edwin Y. Monsma presiding
- "Alleged Confirmations of Scripture That Have not Stood the Test—A Word of Caution"
Prof. R. Laird Harris
- "The Longevity of The Antedeluvians"
Dr. Brian P. Sutherland
- "Our Need of the Facts"
Dr. Walter L. Wilson
- Discussion following each paper
- 1:15 p.m. **Lunch**
- 2:30 p.m. **Round Table Discussion Period**
Topic: "The Value of the Argument From Design and Purpose in Nature."
Leader: Dr. Brian P. Sutherland
- 4:00 p.m. **Papers:** Prof. E. N. Gathercoal presiding
- "The Limits of Selection"
Dr. William J. Tinkle
- "Unsolved Problems of Evolution"
Prof. Paul E. Parker
- "The Kind of Genesis and the Kind of Geology"
Dr. Russell L. Mixter
- 5:30 p.m. **Dinner**
- 8:00 p.m. **Evening Meeting** (Illustrated, open to the public)
"The Plagues of Egypt in the Light of Archaeology"
Dr. Paul R. Bauman
-
-

Thursday, August 29, 1946

- 7:30 a.m. **Devotional Period:** Leader, Dr. Irving A. Cowperthwaite
- 8:00 a.m. **Breakfast**
- 9:00 a.m. **Business Session:** Discussion of the problems and policies of the Affiliation.
- 11:30 a.m. **Film Review:** Viewing of the film, "The God of Creation," which bears the approval of the Affiliation.
- 1:15 p.m. **Lunch**
- 2:30 p.m. **Round Table Discussion Period**
Topic: "The Extent of Changes of Species Since Creation"
Leader: Dr. William J. Tinkle
- 4:00 p.m. **Papers:** Dr. Marion D. Barnes presiding
"Epistemological Assumptions of Scientists"
Dr. Cornelius Van Til (Guest Paper)
"The Bible as a Guide in Scientific Research"
Mr. F. Alton Everest
"The Egyptian Use of Straw in Brickmaking"
Dr. Irving A. Cowperthwaite
Discussion following each paper
- 5:30 p.m. **Dinner**
- 8:00 p.m. **Evening Lecture** (Open to the public)
"Bible Archaeology"
Dr. Allan A. MacRae
-
-

Friday, August 30, 1946

- 7:30 a.m. **Devotional Period:** Leader, Dr. Walter L. Wilson
- 8:00 a.m. **Breakfast**
- 9:00 a.m. **Papers:** Dr. Hawley O. Taylor presiding
- "A God-Centered Science Course for Seniors"
Dr. H. Harold Hartzler
- "Genesis 1:1"
Prof. E. N. Gathercoal
- "Bible Chemistry"
Dr. John R. Chappell
- Discussion following each paper
- 1:15 p.m. **Lunch**
- 2:30 p.m. **Business Session:** Discussion of the problems and policies of the
Affiliation.
-
-

Agenda

1. Publication program
 - Popular abridgement of "Science Symposium" for High School Students and lay public?
 - Tract of testimonies of scientists?
 - Technical monograph series to reach specialist?
 - Should ASA publish a journal? Quarterly?
 - More frequent newsletters?
 - Science textbooks written from creationist view?
 2. "The Science Symposium" (Handbook)
 - Secular or evangelical publishing house?
 - Financing, if guaranteed edition required?
 - Plans for distribution among students?
 3. Library program
 - Means of acquiring volumes?
 - Reviews of every book on the list?
 - Mechanics of circulation of books for reading?
 4. Financing the ASA activities?
 5. Constitution
 - Provisions for resignation from membership?
 - Should annual meeting be mandatory?
 6. Membership
 - Reconsider entrance requirements?
 - Distribution of members; scientific fields, geographically?
 - Inactive members and reasons?
 - Growth trends?
 7. Regional organizations: discussion groups?
 8. Reviewing
 - Pre-publication reviews of manuscripts?
 - Review of Christian films of scientific nature?
 - Wording of approval: "Approve" vs. "Recommend"?
 9. Nomination of new council member for 1947.
 10. Speakers bureau of ASA lecturers: travelling panel?
-
-

ABSTRACTS

“Alleged Confirmations of Scripture that Have Not Stood the Test—A Word of Caution”

R. Laird Harris, Assistant Professor of Old Testament Faith Theological Seminary, Wilmington, Delaware.

It is our desire as men with confidence in both Scripture and true science to show the harmony between the two and show how Scripture has been confirmed. Some examples can be given of what seem surely to be false confirmations. Among them we shall discuss Sir Leonard Woolley's "Flood Deposit" from Ur of the Chaldees, the alleged astronomical proof of Joshua's long day, the account printed in the papers this spring of an alleged eyewitness account of the crucifixion of Christ, described as "a bitter and moving lamentation." A brief analysis will be given of the reasons why these should not have been advanced as confirmations. These points may be useful as guides to us in our desire to advance confirmations of Scripture that will stand the test.

—oOo—

“The Longevity of the Antedeluvians”

B. P. Sutherland, Superintendent of Experimental Research, Consolidated Mining and Smelting Co., Trail, B. C.

The ages of the early patriarchs at maturity and at death are seen to decrease sharply after the flood. Recent work on nucleonics shows that many animals age relatively quickly under the influence of radiations. Possible changes in radiations at the earth's surface which may have occurred at the time of the flood may have been at least a contributing cause in connection with this problem.

—oOo—

“The Limits of Selection”

William J. Tinkle, Chairman of Science Division, Taylor University, Upland, Indiana.

Charles Darwin considered selection a very important process in building the organic world, as evinced by his famous title, "On the Origin of Species by Natural Selection." Weissmann also considered selection to be well nigh all-powerful. But we now know that if it is continued long, the plants or animals involved become a pure line, after which selection is not effective. Facts gleaned from different sources show that the tomato, strawberry, hog, maize, and regal lily have been obtained by importation, aided in some cases by crossing, selection playing a minor role. Selection by man is most effective following crossing or in a species in which the process has not been used before. To consider evolution by selection as an alternative to creation is not justified by the facts.

—oOo—

“Unsolved Problems of Evolution”

Paul E. Parker, Associate Professor of Biology, Marion College, Marion, Indiana.

What is missing in the **trunk** of the ancestral tree of man's evolutionary ascent? This search calls attention to the fact that in every animal phylum there is almost a total lack of living or fossil ancestors to the next more complex phylum. The second problem is to trace the supposed developmental stages of certain important body structures or organs, as bones, lungs, or reproductive organs through their supposed ascent to their complex present. This investigation discovers that there is a complete lack of cooperative or chronological ascent, that as some organs advance, others have apparently gone backwards in the same animal, thus leaving us no ancestral animal to represent a definite stage of complete advancement. Classic examples are the urodel mud-puppy and the elasmobranchi dog fish shark. Conclusion: The evolutionary tree has multiplied thousands of "missing links", not just a few. Also, the evolutionary ascent pattern is strongly opposed to itself.

—oOo—

“Epistemological Assumptions of Scientists”

Cornelius Van Til, Professor of Apologetics, Westminster Theological Seminary, Philadelphia, Pa.

This paper will deal briefly with some of the metaphysical and epistemological presuppositions that are taken for granted by outstanding scientists in our day. It will seek to show that under the color of a neutral methodology men are in fact taking for granted as true a wholly anti-Christian and anti-theistic life and world view. It will also aim to suggest how a truly scientific methodology in science will need to be based on specifically Christian-theistic presuppositions in metaphysics and epistemology.

ABSTRACTS (Continued)
"The Kind of Genesis and the Kind of Geology"

Russell L. Mixter, Professor of Zoology, Wheaton College, Wheaton, Illinois.

In the book, "Tempo and Mode in Evolution", by Simpson, there is emphasis upon the gaps in the geological record. These gaps may be taken as the breaks between the kinds of genesis. The geological strata are accepted as interpreted by the geologists and development within a kind correlated with evolution within an order, such as the evolution of the horse. This is presented merely as a tentative conclusion.

—oOo—

"The Bible as a Guide in Scientific Research"

F. Alton Everest, Associate Director, Moody Institute of Science, West Los Angeles, Calif.

This paper is a plea for realism in the application of biblical records to scientific research. Christian men of science who believe the Bible to be a true account have access to data on natural phenomena which the unbelieving scientist does not have. Examples from astronomy, archaeology, meteorology, medicine, etc., are given which show that the Bible contains hints which far preceeded scientific discoveries in the past. Extrapolation of this method to assist in pushing out the frontiers of scientific knowledge is proposed. Specific examples of biblical passages are cited which may have possible scientific significance in the future. It is felt that positive contributions of this type by Christian men of science will do much toward making the Word known in intellectual fields now largely agnostic and unreached.

—oOo—

"The Egyptian Use of Straw in Brickmaking"

Irving A. Cowperthwaite, Chief Engineer, Thompson Wire Company, Milton, Mass.

A great contribution to modern clay-working is Acheson's discovery at the beginning of the century that the organic material (gallo-tannic acid) added to clay greatly improves its workability and firing characteristics. His comments on the Egyptian use of straw for brick include his belief that it was not as a mechanical binder, but that extracts of the straw was used. This would explain the Hebrews' successful substitution of stubble for straw. Apparently modern science has merely rediscovered this ancient process.

—oOo—

"A God-Centered Science Course For Seniors"

H. Harold Hartzler, Professor of Mathematics, Goshen College, Goshen, Indiana.

A course for science majors is proposed, covering the physical and biological fields, to be divided as follows: macrocosm, microcosm, biocosm. First to be discussed will be the universe as a whole emphasizing God's relation to its vastness. Second, the interior of the atom will be considered, stressing God's interest in the minute aspects of His creation. Third, the subject of life will be discussed and God's part in its creation and preservation stressed. The aim is to give science majors a unified view of the universe, keeping God constantly in the foreground. It is proposed that several instructors collaborate in teaching the course, all of whom agree as to aim and objectives. It is hoped that such a course will become a reality in the curricula of a number of Christian colleges.

—oOo—

"Genesis 1:1"

E. N. Gathercoal, Emeritus Professor of Pharmacognosy, University of Illinois, Chicago, Ill.

This is a discussion of Genesis 1:1 in the light of recent discoveries in physics; the time, the manner, and the accomplishment of God as expressed in this verse and supported by other passages of Scripture; the primary source of power as indicated in the Bible. Does this first verse of Genesis have a direct bearing on the remainder of this first chapter of Genesis? Will the evidence of power or energy inherent in matter (mass) tend to weaken or destroy "modernism" in the Christian church?

—oOo—

Round Table Discussion, "The Value of the Argument From Design and Purpose in Nature."

- I. The use of the argument and the conclusions derived as found in the Bible.
 - II. Historical review
 - Early writers up to Paley
 - Effects of Darwinism and related theories
 - Recent ideas
 - III. Typical examples from modern science
 - Inanimate nature; cosmogony, geology, chemistry, etc.
 - Animate nature; vegetable and animal life
 - IV. The problem of imperfection
-
-

PROGRAM
FOR THE
SECOND ANNUAL CONVENTION
THE AMERICAN SCIENTIFIC
AFFILIATION, INC.
AT
TAYLOR UNIVERSITY
UPLAND, INDIANA
AUGUST 27, 28, and 29, 1947



A group of Christian scientific men devoting themselves to the task of reviewing, preparing, and distributing information on the authenticity, historicity, and scientific aspects of the Holy Scriptures in order that the faith of many in Jesus Christ may be firmly established.



*That they may see
and know,
and consider,
and understand together
that the hand of the Lord hath done this,
and the Holy one of Israel hath created it.—Isaiah 41:20*

Wednesday, August 27, 1947

- 7:30 a. m. **Devotional Period:** Leader, Dr. H. Harold Hartzler.
- 8:00 a. m. **Breakfast.**
- 9:00 a. m. **Registration.**
- 9:30 a. m. **General Session:** Opening of the convention. Discussion of the program by Dr. I. A. Cowperthwaite, Chairman of the Convention Committee, and Dr. William J. Tinkle, Chairman of the Local Committee.
- 10:00 a. m. **Business Session:** President F. Alton Everest presiding. Annual reports, review of A.S.A. activities, report on the Students' Science Symposium, etc.
- 11:45 a. m. **Memorial Service** in memory of Dr. Will H. Houghton and his part in the organizing of the American Scientific Affiliation by President F. Alton Everest.
- 12:30 m. **Lunch.**
- 2:30 p. m. **Papers:** Prof. R. Laird Harris presiding.
"The Christian Approach to the Student Mind"
Dr. Francis R. Steele (Guest Paper).
"Panin's Work on Bible Numerics"
Prof. Peter W. Stoner.
- 4:00 p. m. **Round Table Discussion Period**
Topic: "Influencing the Unbelieving Scientist for God"
Leader: Prof. Paul DeKoning.
- 6:00 p. m. **Dinner.**
- 8:00 p. m. **Evening Lecture** (Open to the public).
"Scientific Confirmation of the Bible"
Dr. Cecil B. Hamann.
-
-

Thursday, August 28, 1947

- 7:30 a. m. **Devotional Period:** Leader, Dr. Edwin Y. Monsma.
- 8:00 a. m. **Breakfast.**
- 9:00 a. m. **Papers:** Prof. Paul E. Parker presiding.
"Extent of Change since the Origin of Species".
Dr. Russell L. Mixer
"The Theory of Evolution, A Product of the Age".
Dr. William J. Tinkle
- 10:30 a. m. **Round Table Discussion Period.**
Topic: "Homology as Evidence of Evolution or Design".
Leader: Dr. Paul Bender.
- 12:30 p. m. **Lunch.**
- 2:30 p. m. **Papers:** Dr. Roger J. Voskuyl presiding.
"Christian Theism and the Empirical Sciences".
Dr. Cornelius Jaarsma (Guest Paper)
"The Spiritual Interpretation of Science by Jeans and Eddington".
Prof. Bernard Ramm
- 4:00 p. m. **Round Table Discussion Period.**
Topic: "Dating the Rock Strata".
Leader: Dr. Milo A. Rediger.
- 6:00 p. m. **Dinner.**
- 8:00 p. m. **Evening Lecture** (Open to the public).
"The Moody Institute of Science".
President F. Alton Everest
Following the lecture, the motion picture, "The God of the Atom",
will be shown.
-
-

Friday, August 29, 1947

7:30 a. m. **Devotional Period:** Leader, Dr. Joseph S. Maxwell.

8:00 a. m. **Breakfast.**

9:00 a. m. **Paper:** Prof. Willis Dunn presiding.
"A Positive and Aggressive Christian-Scientific Testimony for this Day".

Dr. Irving A. Cowperwaite

9:30 a. m. **Round Table Discussion Period.**
Topic: "Looking into the Future with The American Scientific Affiliation".
Leader: President F. Alton Everest.

12:00 m. **Adjournment.**

12:30 p. m. **Lunch.**

Agenda

A partial list of topics to be considered in the Business Session and the Round Table Discussion Period on the future of the ASA.

1. Report on "The Science Symposium".
 2. Desirability and need for an ASA publication.
 3. Discussion of library program.
 4. Status of ASA speakers bureau
 5. ASA regional meetings.
 6. The 1948 annual convention.
 7. The probable course of future development for ASA.
 8. Nomination of new council member for 1948.
-
-

ABSTRACTS

"The Christian Approach to the Student Mind"

Francis R. Steele, Assistant to the Curator of the Babylonian Section of the University of Pennsylvania Museum, Philadelphia, Pennsylvania.

Evangelical Christianity is making little headway in the modern student world. This situation probably springs from the fact that a deep gulf of misunderstanding and distrust separates the one from the other. It will be the purpose of this paper to suggest some steps in the preparation for and implementation of an effective witness on the American college campus to the atoning death of our Lord Jesus Christ. In general two things appear to be most necessary; a careful and sincere self-examination of ourselves and a better understanding and appreciation of the students whom we wish to reach with the Gospel.



"Panin's Work on Bible Numerics"

Peter W. Stoner, Chairman, Departments of Mathematics, Engineering, Astronomy, and Architecture, Pasadena Junior College, Pasadena, California.

Based upon the "numeric value" of the Hebrew and Greek alphabets, Dr. Ivan Panin has presented supposed tests for and demonstrations of the inspiration of the Bible. The number of "features" (various combinations of the number seven) is the criterion.

It will be demonstrated that this work exhibits a lack of knowledge of the principles of mathematical probability. Some of Panin's work and his tests for inspiration will be reviewed. Illustrations of the tremendous number of "features" which may be found in any literature with any assigned values for the alphabet will be presented. A brief account of contacts with Panin and his supporters will be given.



"Extent of Change since the Origin of Species"

Russell L. Mixter, Professor of Zoology, Division chairman, Wheaton College, Wheaton, Illinois.

Mutations are gene changes which produce alterations in structure and function usually by increasing or decreasing qualities already present in organisms. Human races differ in genes similar to those causing differences between species. Within some species sterility develops. It is conceivable then that the sterility between some species may have been formerly within a species.

However, there are limits to descent with modification. Evidence from geographic distribution of animals and paleontology indicates that an animal, originally created, may have had descendents now as varied as those within a family or order. Gaps almost universally occurring between orders imply creative activity.



"The Theory of Evolution, A Product of the Age"

William J. Tinkle, Professor of Biology, Chairman of Science Division, Taylor University, Upland, Indiana.

The theory of evolution is worship of progress. It was part of the protest against medieval doctrines sanctioned by the church, which contained some errors. The church leaders were allied with the nobles, and since both of these groups interfered with the rise of the middle class, a contrary doctrine was welcomed.

Success of the theory was not due to outstanding discoveries by its authors, who had but meager biological education.

It was no accident that the theory emanated from England in the nineteenth century. The fifty years preceding Darwin's "Origin of Species" were a period of gradual progress in wealth and physical comforts for the owners of industries, and the scholars were allied with them. "Natural selection" gave to their economic competition the sanction of natural law.



"Christian Theism and the Empirical Sciences"

Cornelius Jaarsma, Professor of Philosophy, Calvin College, Grand Rapids, Michigan.

Christian theism is the Christian system of thought implied in the Christian faith and based on truth as revealed in the Scriptures and in the revelation of God in history, in the world of nature, in human conscience, and in human reason.

The empirical sciences are the sciences based on experimental and demonstrable evidence. They have virtue in the verification of assumed truth, as predictive of anticipated events, as means of adjustment by man to himself and his environment, as interpretative of the creative work of God. These values can accrue beneficially only when the sciences know their place in the order of revealed truth.



"The Spiritual Interpretation of Science by Jeans and Eddington"

Bernard Ramm, Professor of Apologetics, The Bible Institute of Los Angeles, Los Angeles, California.

Breaking with the tradition that science is supposed to be more favorable to naturalism, Jeans and Eddington contend that modern physical theory (relativity, electrical concept of matter, quantum mechanics, statistical mechanics) suggests idealism as its only plausible background. Although these two men differ somewhat in their analyses, arguments, and abilities, they arrive at identical conclusions: that modern physical theory can only be understood in terms of metaphysical idealism, and epistemological idealism. To these two propositions is added the third: the modern theory of activity on the atomic level provides a new brief for the freedom of the self.



"A Positive and Aggressive Christian-Scientific Testimony for This Day"

Irving A. Cowperthwaite, Chief Engineer, Thompson Wire Company, Boston, Mass.

The philosophies of materialism and evolution have dominated scientific thought and expression with the result that exponents of theism and creation have been on the defensive. An aggressive assertion of the Christian interpretation of science is an urgent need for this day.

Faith in God as the creator of the universe is not an intellectually lazy refuge from the problems of beginnings, but is a positive dynamic doctrine that beyond the universe of matter and energy is an eternal and omnipotent Being who has life, intelligence, and creative power.

God is infinite and infinity has no limits. To claim that God, the Creator and Sustainer of the universe, is unable to enter into the personal problems of each individual, is to put far-flung limits on the infinite which are inadmissible.

Members of the Executive Council

F. ALTON EVEREST (1951)*, President
ALLAN A. MacRAE (1950), Vice-President
MARION D. BARNES (1947), Secretary-Treasurer
EDWIN Y. MONSMA (1948)
RUSSELL L. MIXTER (1949)

* Year of retirement from Council

Past Council Members

JOHN P. VAN HAITSMAN	(1942)
IRVING A. COWPERTHWAIT	(1943)
RUSSELL D. STURGIS	(1944)
PETER W. STONER	(1945)

Convention Committees

IRVING A. COWPERTHWAIT, General Chairman
PAUL DeKONING, Convention Committee
R. LAIRD HARRIS, Convention Committee
RUSSELL L. MIXTER, Convention Committee
WILLIAM J. TINKLE, Convention Committee
MILO A. REDIGER, Local Committee
MISS RUTH HASKINS, Local Committee
WILLIS DUNN, Local Committee



Convention Details

Transportation:

Upland is between Marion and Hartford City on Indiana highways 22 and 221. Taylor University is one mile south of Upland. There is bus service from Marion and Hartford City three times daily, and the fare from either city is 30 cents.

Housing:

Rooms are available in a dormitory at \$1.00 per person per night, with sheets, blankets and towels provided. Meals will be about \$1.50 per day.

Members of the Executive Council

F. ALTON EVEREST (1951)*, President
 ALLAN A. MacRAE (1950), Vice-President
 EDWIN Y. MONSMA (1948)
 RUSSELL L. MIXTER (1949)
 ROGER J. VOSKUYL (1952)

* Year of retirement from Council

Past Council Members

JOHN P. VAN HAITSMA (1942)
 IRVING A. COWPERTHWAITTE (1943)
 RUSSELL D. STURGIS (1944)
 PETER W. STONER (1945)
 MARION D. BARNES (1947)

Convention Committees

Program Committee—

PAUL DeKONING, Chairman
 PAUL BENDER
 JOSEPH S. MAXWELL
 FRANK CASSEL

Local Committee—

EDWIN Y. MONSMA, Chairman
 MARTIN KARSTEN

★

Information

The third annual convention of The American Scientific Affiliation will be held September 1, 2, and 3, 1948, on the campus of Calvin College, an educational institution of the Christian Reformed Church. It is located in the 1300 block Franklin Street in the southeast end of Grand Rapids, Mich.

Rooms will be available in a dormitory located on the campus at 701 Giddings Avenue. The charge will be \$1.00 per person per night, with sheets, blankets, and towels provided. Meals will be served in the same building at approximately \$1.75 per day. Reservations may be made with Prof. M. Karsten, Calvin College, Grand Rapids.

PROGRAM

FOR THE

THIRD ANNUAL CONVENTION

THE AMERICAN SCIENTIFIC

AFFILIATION, Inc.

AT

CALVIN COLLEGE

GRAND RAPIDS, MICHIGAN

SEPTEMBER 1, 2, and 3, 1948

★

A group of Christian scientific men devoting themselves to the task of reviewing, preparing, and distributing information on the authenticity, historicity, and scientific aspects of the Holy Scriptures in order that the faith of many in Jesus Christ may be firmly established.

★

*That they may see
 and know,*

*and consider,
 and understand together*

*that the hand of the Lord hath done this,
 and the Holy one of Israel hath created it.— Isaiah 41:20*

Tuesday, August 31, 1948

8:00 p. m. Annual Meeting of the Executive Council

Wednesday, September 1, 1948

7:30 a. m. **Devotional Period:** Leader, Prof. Paul DeKoning

8:00 a. m. **Breakfast**

9:00 a. m. **Registration**

9:30 a. m. **General Session:** Invocation

Word of Welcome by Prof. H. Schultze, President of Calvir College. Brief discussion of the program by Paul DeKoning Chairman of the Program Committee. Other remarks by Dr Edwin Monsma, Chairman of the Local Committee.

10:00 a. m. **Business Session:** President F. Alton Everest presiding.

Annual reports, review of Film activities, presentation of Symposium "Modern Science and Christian Faith."

12:30 m. **Lunch**

2:00 p. m. **Scientific Papers:** Dean Lorin G. Miller presiding.

1. "Christian View on the Development of Science"

Dr. Marion D. Barnes

2. "Meaning of Mathematics"

Dr. Harold H. Hartzler

3. "Antiquity of Hominoid Fossils"

Dr. Laurence J. Kulp

6:00 p. m. **Dinner**

8:00 p. m. **Public Lecture**

"Has Archeological Research Proved Solomon to be a Myth?"

Dr. Allan A. MacRae



Thursday, September 2, 1948

7:30 a. m. **Devotional Period:** Leader, Dr. Irving Cowperthwaite

8:00 a. m. **Breakfast**

9:00 a. m. **The Field of Medical Science:** Dr. J. S. Maxwell presiding

1. Guest Paper —
 "The Eye as An Optical Instrument"
 Dr. Frank Allen

2. Symposium —

- a. "Was Moses the Father of Hygiene?"
- b. "Could Leprosy Have Been Conquered?"
- c. "Could Tuberculosis Have Been Conquered?"

12:30 m. **Lunch**

1:30 p. m. **Paper:** "A Physicist's Glimpse of God"
 Dr. Paul E. Bender

2:30 p. m. **The Subject of Evolution,** Dr. R. J. Voskuyl presiding

1. "Some Basic Presuppositions in Evolutionary Thinking"
 Dr. Edwin Y. Monsma
2. "The Mechanisms of Evolution"
 Dr. Russell Mixter
3. "The Scientifico-Logical Structure of the Theory of Evolution" (Guest Paper)
 Dr. Bernard Ramm

6:00 p. m. **Dinner**

8:00 p. m. **Public Lecture**
 "The Role of ASA in the Christian Testimony"
 President F. Alton Everest

Following the lecture, the film "Voice of the Deep" will be shown through the courtesy of the Moody Institute of Science.

Friday, September 3, 1948

7:30 a. m. **Devotional Period:** Leader, Dr. Marion Barnes

8:00 a. m. **Breakfast**

9:00 a. m. **Guest Paper**
 "Christian Treatment of the Mentally Ill"
 Dr. M. Beukema

9:30 a. m. **Round Table Discussion**

Leader: President Everest

Subject: "What Shall be the Role of ASA in the Study of Evolution?"

11:30 a. m. **Final Business Session and Adjournment**

12:30 p. m. **Lunch**

★

Business Agenda

Matters to be considered during the business sessions:

Secretary-treasurer report of activity and present condition of ASA.

Report from the librarian and recommendations for the future.

Monograph series publications.

Tract publication committee report of progress and planning.

Report of the nominating committee for council member.

"Modern Science and Christian Faith," the symposium volume published by ASA.

Constitutional changes necessitated in the light of seven years of experience.

Film review activities.

Plans for the 1948 convention in Los Angeles.

Abstracts of some of the Papers

"Christian View on the Development of Science"

Marion Barnes, El Dorado, Arkansas.

A brief outline of the development of science will be presented with emphasis on the contribution made by application of the scientific method, the role of serendipity, and "hunches". A Christian interpretation of both the development and the achievements of science will be given. Some conclusions concerning the role of the Christian scientist in the world of science today will be drawn.

★

"Antiquity of Hominoid Fossils"

J. Laurence Kulp, Lecturer in Geology and Chemistry, Columbia University,
New York, N. Y.

One of the most critical problems confronting the student of historical apologetics is the length of time man, or man-like creatures, has lived on the earth. There is great ignorance in Christian circles regarding both the facts concerning these ancient hominoid fossils and the methods used in dating them.

The various effective techniques used in establishing Pleistocene (roughly the last 1,000,000 years) chronology will be described and evaluated. The geological evidence for the antiquity of certain important and representative hominoid fossils such as *Java Man, Peking Man, Heidelberg Man, etc., will be discussed. Upper and lower limits for the age of these remains will be indicated.

Considerable scientific evidence is presented that man-like creatures have been on the earth for at least many tens of thousands of years. This requires a reexamination of our interpretations of Genesis but is not disastrous to a strong conservative apologetic.

* Scientific names:

Pithecanthropus erectus
Sinanthropus Pekinensis
Homo Heidelbergensis

"Some Basic Presuppositions in Evolutionary Thinking"

Edwin Y. Monsma, Professor of Biology, Calvin College,
Grand Rapids, Michigan.

This paper mentions four presuppositions which are fundamental assumptions of evolutionists but which cannot be accepted by Christian men of science because they believe in the Bible as the inspired Word of God. Counterparts for these presuppositions are suggested. Certain questions with respect to the Christian interpretation of natural phenomena are raised. The paper aims to provoke discussion on a positive Christian approach to scientific problems, particularly those concerned with evolution.

★

"The Mechanisms of Evolution"

Russell L. Mixer, Professor of Zoology, Wheaton College.

Two changes in the hereditary determiners, mutations and chromosomal rearrangements, may be the source of the descent of some species from others.

These changes are assumed to be capable of producing the transitions between major groups of animals, such as from reptiles to birds. Hereditary studies are incapable of establishing this assumption.

Goldschmidt (University of California) emphasizes the weaknesses of those who believe the mutations are effective in producing macro-evolution, but the method advocated by Goldschmidt is in the minds of many geneticists . . . "a belief in miracles."

The hereditary alterations are not directed toward progressing structures. Scientists are at a loss to explain the origin of complex organs; the vertebrate eye appears fully formed in animals "as if from the brow of Zeus."

A belief in Creation is considered reasonable by some modern scholars.

★

"Christian Treatment of the Mentally Ill"

Dr. M. J. Beukema, Pine-Rest Sanitarium and Christian Psychoopathic
Hospital, Grand Rapids, Michigan.

A paper presenting some of the values and some of the problems associated with Christian treatment of the mentally ill. An attempt is made to point out something of the difference in treatment when applied by a Christian psychiatrist as compared to that by a non-religious psychiatrist. An answer is also given to the frequently expressed opinion of many Christians that if only the patient is given sufficient spiritual encouragement and is set straight in his religious thinking that then he should get well.

PROGRAM SUMMARY**Monday, August 22, 1949**

- 8:45 A.M. Registration
- 9:15 A.M. Opening Session
- 10:30 A.M. Technical Session
- 1:00 P.M. Technical Session
- 2:20 P.M. Bus leaves for Mount Wilson

Tuesday, August 23, 1949

- 7:15 A.M. Devotional Period
- 9:00 A.M. Technical Session
- 11:30 A.M. Motion Picture, "The Story of Palomar"
- 1:30 P.M. Technical Session
- 2:10 P.M. Bus leaves on La Brea Fossil trip.
- 8:00 P.M. Public Lecture, Dr. Allan A. MacRae

Wednesday, August 24, 1949

- 7:15 A.M. Devotional Period
- 9:00 A.M. Bus leaves for Palomar Observatory

Thursday, August 25, 1949

- 7:15 A.M. Devotional Period
- 9:00 A.M. Technical Session
- 1:30 P.M. Technical Session
- 7:00 P.M. Bus leaves for Moody Institute of Science

Friday, August 26, 1949

- 7:15 A.M. Devotional Period
- 9:00 A.M. Technical Session
- 11:00 A.M. Business Session
- 12:00 A.M. Adjournment of Convention

OFFICIAL PROGRAM*Fourth Annual Convention*

**THE
AMERICAN SCIENTIFIC
AFFILIATION**

(Incorporated)

A group of Christian scientific men devoting themselves to the task of reviewing, preparing, and distributing information on the authenticity, historicity, and scientific aspects of the Holy Scriptures in order that the faith of many in Jesus Christ may be firmly established.

*August 22nd through 26th**1949*

Convention Headquarters:
The Bible Institute of Los Angeles
558 South Hope Street (Corner Sixth Street)
Los Angeles, California

CONVENTION COMMITTEE

General Chairman:

Peter W. Stoner, M. S.
Chairman Department of Mathematics,
Engineering, and Astronomy,
Pasadena City College,
Pasadena, California

Committee on Papers:

H. Harold Hartzler, Ph.D. (Chairman)
Professor of Mathematics
Goshen College
Goshen, Indiana

Hendrik J. Oorthuys, M.S.
Assistant Professor of
Electrical Engineering
Purdue University
Lafayette, Indiana

John R. Howitt, M.D.
Senior Assistant Physician
Ontario Hospital
Hamilton, Ontario

Roland N. Icke, Ph.D.
School of Medicine
University of Southern California
Los Angeles, California

Committee on Arrangements:

David M. Spaulding, M.A. (Chairman)
Instructor in Life Sciences
Pasadena City College
Pasadena, California

Earl C. Rex, M.S.
Professor of Mathematics
Pepperdine College
Los Angeles, California

Hawley O. Taylor, Ph.D.
Ambassador College
Altadena, California

Host Representative:

Bernard Ramm, M.A.
Professor of Apologetics
The Bible Institute of Los Angeles
Los Angeles, California

The purpose of the convention:
"That they may see and know, and consider,
and understand together that the hand of the
Lord hath done this, and the Holy one of Israel
hath created it."

Isaiah 41:20

Monday, August 22, 1949

- 8:45 A.M. **Registration**
9:15 A.M. **Opening Session**
Prof. Peter W. Stoner presiding
1. Invocation
2. Word of welcome—
Dr. Samuel H. Sutherland, Dean of the
Bible Institute of Los Angeles
3. Annual President's report—
Mr. F. Alton Everest
4. Announcements concerning the conven-
tion Program—Dr. H. Harold Hartzler
- 10:30 A.M. **Technical Session**
Prof. Peter W. Stoner presiding
1. "Gamow's Theory of Element Building"
Mr. Delbert Eggenberger
2. "The Carbon 14 Method of Dating"
Dr. J. Laurence Kulp
- 11:40 A.M. **Adjournment**
1:00 P.M. **Technical Session**
Dr. Hawley O. Taylor presiding
1. Invocation
2. "Fifty Years of Development in Astron-
omy and Its Impact on Scriptural Inter-
pretation"
Prof. Peter W. Stoner
3. "The Hole in the North"
Dr. H. Harold Hartzler
- 2:10 P.M. **Adjournment**
2:20 P.M. Bus leaves for Mount Wilson Observatory In-
spection Trip

Tuesday, August 23, 1949

- 7:15 A.M. **Devotion Period** led by Dr. Edwin Y. Monsma
9:00 A.M. **Technical Session**, Dr. Paul Bender presiding
1. Invocation
2. "Fossil Sequence in Clearly Superim-
posed Rock Strata"
Miss Cordelia Erdman
3. "Deluge Geology"
Dr. J. Laurence Kulp
4. "Modern Physics and Christian Faith"
Dr. Aldert van der Ziel
- 11:30 A.M. **Motion Picture**: "The Story of Palomar"
12:00 Noon **Adjournment**
1:30 P.M. **Technical Session**
Prof. Hendrik J. Oorthuys presiding
1. "Daniel and the Median Empire"
Dr. Allan A. MacRae
- 2:00 P.M. **Adjournment**
2:10 P.M. Bus leaves on La Brea Fossils Inspection Trip
to Los Angeles County Museum and La
Brea tar pits.
- 8:00 P.M. **Public Lecture**, Auditorium Church of the Open
Door
"New Light on the Old Testament"
Dr. Allan A. MacRae

Wednesday, August 24, 1949

- 7:15 A.M. **Devotional Period** led by Dr. Paul Bender
9:00 A.M. Bus leaves on all-day trip to Palomar Observa-
tory and points of interest enroute.

Thursday, August 25, 1949

- 7:15 A.M. **Devotional Period** led by
Prof. Edmund N. Gathercoal
- 9:00 A.M. **Technical Session**
Dr. Roger J. Voskuyl presiding
1. Invocation
 2. "Biblical Data on the Age of Man"
Dr. R. Laird Harris
 3. "The Atomic Bible"
Dr. Joseph S. Maxwell
 4. "Eye Witness"
Dr. Roy M. Allen
 5. "Scriptural Truths in Mathematics"
Dr. Angeline J. Brandt
- 12:00 Noon **Adjournment**
- 1:30 P.M. **Technical Session**
Dr. Irving A. Cowperthwaite presiding
1. Invocation
 2. "Behaviorism and Philosophical Psychology"
Prof. Bernard Ramm
 3. "Basic Anxiety"
Dr. Philip B. Marquart
 4. "Modern Science and Values"
Dr. Carl F. H. Henry
- 3:30 P.M. **Adjournment**
- 7:30 P.M. Bus leaves for Moody Institute of Science inspection Trip.

Friday, August 26, 1949

- 7:15 A.M. **Devotional Period** led by
Dr. Brian P. Sutherland
- 9:00 A.M. **Technical Session**
Dr. John R. Howitt presiding
1. Invocation
 2. "The Fall and Its Relation to Present Conditions in Nature"
Dr. Brian P. Sutherland
 3. "Symposium on Medicine and the Bible"
Led by Dr. John R. Howitt
- 11:00 A.M. **Final Business Session**, Mr. F. Alton Everest presiding.
- 12:00 Noon Adjournment of the Convention

INSPECTION TRIPS**Mount Wilson Observatory**

(Monday, August 22nd. Bus leaves Biola at 2:20 p.m.)

The trip is planned so that the observatory is reached in time to see the 150-foot Tower Telescope in use. This instrument is used to observe the sun. A direct image of the sun approximately 16 inches in diameter allows ready observation of sunspots, corona, etc. The spectrograph used in analyzing the light of the sun will also be demonstrated.

After the inspection of the Tower Telescope, the following instruments will be inspected in the order of their historical interest:

1. The Snow Telescope
2. The 60-Foot Telescope
3. The 50-Foot Tower Telescope
4. The 60-Inch Telescope
5. The 100-Inch Telescope

The Museum will also be visited briefly after which dinner will be served at the Mount Wilson Hotel. The in-

spection of the astronomical instruments will be personally conducted by Mr. Joseph Hickocks of the Mount Wilson Observatory staff. For those interested, a brief inspection of one of the nearby television transmitters may be arranged.

Approximate cost: Bus - \$1.50

Dinner \$1.25 to \$1.50

Trip Organizer: Prof. Peter W. Stoner

La Brea Fossils Inspection Trip

(Tuesday, August 23rd. Bus leaves Biola at 2:00 P.M.)

The collection of fossils obtained from the asphalt deposits of Rancho La Brea is, perhaps, one of the most important in the world as pertains to excellent state of preservation and wide variety of species represented. More than 200 different kinds of animals and plants are now known from this deposit, including especially good representations of mammals and birds. More than 4000 individual mammalian specimens have been obtained. These include extinct forms such as the dire wolf, the sabre-toothed cat, camel, mastadon, and ground sloth.

The group will first visit Hancock hall of the Los Angeles County Museum where the mounted specimens may be inspected and later the Rancho La Brea tar pits in Hancock Park on Wilshire Boulevard. Dr. Hildegard Howard, Curator of Avian Paleontology of the Los Angeles County Museum will personally conduct the tour.

Approximate cost: Bus - \$0.75

Trip Organizer: Prof. Earl C. Rex

Palomar Observatory Trip

(Wednesday, August 24th. Bus leaves Biola at 9:00 A.M.)

An introduction to this trip will be given through the film, "The Story of Palomar" which will be shown Tuesday morning. This film depicts the great engineering feat of casting, grinding, and transporting the large 200-inch mirror around which the 200-inch Hale telescope is built. This world's largest telescope will be seen on Palomar Mountain as well as the Schmidt telescope, noted for its great photographic speed, detail, and wide-angle coverage.

On the trip to Palomar, the group will stop to visit Mission San Juan Capistrano, one of the finest and most interesting of the many California Missions.

On the return trip through Anaheim, the group will stop for dinner at Knott's Berry Farm, noted both for its food, and the Ghost Town. This most remarkable reconstruction of early Californian mining towns is very extensive and complete even to the place where the visitor can pan his own gold.

Approximate costs: Bus\$3.00
Lunch Hotel Capistrano...\$1.00 to \$1.65
Dinner Knott's Berry Farm.....\$1.75

Trip Organizer: Prof. David M. Spaulding

Moody Institute of Science

(Thursday, August 25th. Bus leaves Biola 7:00 P.M.)

The Moody Institute of Science, a Department of the Moody Bible Institute of Chicago, is the place of production of the famous Sermons From Science Films, "God of Creation," "God of the Atom," and "Voice of the Deep." The American Scientific Affiliation has an interest in these films inasmuch as each has borne the approval of the ASA, having passed the scientific scrutiny of the ASA Film Reviewing Committee.

The various departments will be visited, such as photographic, lapse time, art and animation, editing, release rinting, sound stage, recording room and shops. The

two tons of demonstration equipment used in Sermons From Science evangelistic tours will be available.

The ASA will be given the opportunity of viewing at least a preliminary version of the forthcoming film, "Dust or Destiny" prior to voting on the approval at the final business session. This film treats some of the wonders of the human body, the echo-locating ability of the bat, bird migration, the dry-land-spawning grunion, and tropisms in plants. It may be necessary to limit admission to those who have registered due to space limitations.

Approximate cost: Bus - \$1.00

Trip Organizer: F. Alton Everest

ABSTRACTS OF PAPERS

Delbert N. Eggenberger, B.Ed.

Research Chemist
Armour and Company, Chicago

The observance of an expanding universe coupled with developments of recent years in the structure and transformation of atomic nuclei have led to several theories of element-building from primary particles. Most interesting has been that due largely to Gamow and based upon neutron capture as the first-order process. The assumption of an initial sudden, and unexplained, appearance of concentrated energy of radiation and resultant neutrons implies creation ex nihilo. This is suggested as the possible interpretation of Genesis 1:1. Other processes of element-building are being studied but all have one thing in common, the sudden appearance of a quantity of primordial building material.

THE CARBON 14 METHOD OF DATING

J. Lawrence Kulp, Ph.D.

Lecturer in Geology
Columbia University - New York, N. Y.

By means of the radioactive carbon (isotope 14) concentration in dead plants and animals it is possible to estimate the time elapsed since death. This is possible because (1) living things have a constant content of carbon 14, (2) the half life of carbon 14 is known, (3) experimental techniques are adequate for measurement. Dates back to 25,000 years have been obtained. The theoretical limit is 50,000 years. Calibration points in written history back to 3000 B.C. have been verified. Preliminary work indicates Neanderthal remains (the youngest stratigraphically of the prehistoric fossil men) are at least older than 25,000 years.

Fifty Years of Development in Astronomy and Its Impact on Scriptural Interpretation

(Some items lap over into other sciences.)

Peter W. Stoner, M.S.

Pasadena City College Pasadena, California
Chairman Dept. of Mathematics, Engineering, and Astronomy
Genesis 1:1. The truth of this verse has been shown by: The age of the Earth, the age of meteorites, the age of the earth moon system, the age of the Sun, the age of our galaxy taken from star streaming, the age of the universe taken from galactic velocities, atomic energy.

Genesis 1:2. This verse has changed from a point of attack on the Bible to powerful evidence for its inspiration by: elimination of the nebular hypothesis, discovery of dark nebulae, the stellar sequence.

Genesis 1:3-5. Light has been shed on this verse by the determination of limiting sizes for stars.

Genesis 1:14-18. Light has been shed on this passage by the stellar sequence and Astro-Physical determination of some early stages of the earth.

Genesis 2:4-5. This passage ties the above passage with Historical Geology in a very remarkable way.

THE HOLE IN THE NORTH

H. Harold Hartzler, Ph.D.

Professor of Mathematics
Goshen College
Goshen, Indiana

A number of speakers and writers speak of a possible opening in the sky where the stars are supposed not to exist. This place in the skies is usually spoken of as being in the north. In this paper the problem of the position of the north is first taken up. Then the evidence of the hole in the starry heavens is presented. That the stars do thin out in directions at right angles to the galactic plane, there is no doubt. However the best scientific evidence is that the presence of a rift in the sky merely shows us the presence of a dark nebula.

Finally the question of the place or position of Heaven is discussed. Since God transcends such quantities as space, matter and time and we are to be like Him, it is argued that the reality of Heaven is not physical but spiritual.

DELUGE GEOLOGY

J. Laurence Kulp, Ph.D.

Lecturer in Geology
Columbia University
New York, N. Y.

That the flood of Noah accounts for the sedimentary rocks of the earth's crust has been suggested repeatedly since Medieval times. In this century it has become among fundamentalists the "Christian view of geology." This is most unfortunate because (1) it is absurd to the educated non-Christian and (2) it has given apparent support to favored but impossible interpretations of Genesis.

The factual basis for the major concepts of the science of geology will be presented. The tenets of Flood Geology will be evaluated in terms of physical and chemical laws, applicable to the earth's crust.

MODERN PHYSICS AND CHRISTIAN FAITH

A. Van der Ziel, Ph.D.

Associate Professor of Physics
University of British Columbia

In this paper the fundamental nature of physics is discussed. It is shown that physics is an experimental science, based upon observations and experiments and is not a philosophy. It does not discuss the "nature" of things, but it describes sufficiently what phenomena occur, how they occur, and what we can do with them.

If physics is thought to tell us something about the "nature" of things, then there is always the danger that an analogy is taken to be a reality. If physics is thought to be a descriptive science, this danger is much less acute and analogies can have their rightful place.

The answer to the question whether there is religious truth and where it can be found does not come from physics or from any other science. It comes from God Himself, from His revelation in Christ. The message of God's love and mercy towards us comes through the mouths of the prophets and apostles, not through the mouths of scientists.

DANIEL AND THE MEDIAN EMPIRE

Allan A. MacRae, Ph.D.

President, Faith Theological Seminary
Wilmington, Delaware

It is frequently stated that the author of the Book of Daniel held an erroneous view of the succession of the great ancient world empires, and that both the historical and the prophetic portions of the book contain references to a

Median world-hegemony, following that of Babylon and preceding that of Persia, but contrary to the archaeological evidence.

This paper will examine the evidence on this point, and outline the present state of the investigation regarding the pertinent Biblical statements and the relevant archaeological discoveries.

BIBLICAL DATA ON THE AGE OF MAN

R. Laird Harris, Ph.D.
Professor of Biblical Exegesis
Faith Theological Seminary
Wilmington, Delaware

A first reading of the Bible would lead approximately to Archbishop Ussher's conclusions that Abraham lived about 2000 B.C., the flood occurred in 2348 B.C. and creation in 4004 B.C. This assumes no gaps in the genealogies of Gen. 5 and 11. Parallel genealogical phenomena plus the Biblical representation of the growth of nations from Noah to Abraham, plus archaeological data argue for gaps in the genealogy of Gen. 11. If we could date the flood, we might estimate the gaps. The flood if not worldwide at least covered all the territory occupied by man. So great a deluge at a comparatively recent date might be expected to leave marks. There is no bona fide archaeological evidence for Noah's flood. This is a problem for geology. Archaeology seems to show settled cities to have begun around 4000 B.C. Biblical picture of Noah's status in civilization would be in line with dating flood not long before this. Allowing 2-3000 years for the 10 generations of Gen. 11 (whose combined ages totals 2261 years) would seem to stretch the picture about enough. The ages of the antediluvian patriarchs were greater. If we assume a span not appreciably longer than the total of their ages we should have 8500 years or a date of 12,000 B.C. for the creation of man. The Bible's style changes between the record of creation, which was clearly a thing revealed to Moses, and the story of Adam's family and successors which seems to be derived in part from tradition. We should remember that writing originated about 3200 B.C. A few great names can be providentially preserved for some thousands of years by tradition—especially if the patriarchs attained great ages. But tradition for hundreds of thousands of years seems out of the question. The Bible gives no positive data, but its picture indicates an antiquity of man in the tens of thousands rather than hundreds of thousands of years.

THE ATOMIC BIBLE

Joseph S. Maxwell, M.D.
Fairmont, West Virginia

Using root meanings of Hebrew and Greek words in the Bible, ideas suggesting modern atomic thinking are found in the Bible. Many other words studied are omitted for lack of space.

A few of the most pertinent references are affixed for each thought offered. Inference and spiritualising is avoided. This study is offered especially to chemists and physicians who may not have time to dig out such meaningful roots, and in hopes that the basic truth offered to us by God's Book may facilitate some useful research.

EYE WITNESS

Roy M. Allen, Sc.D.
Consulting Metallurgist
Glen Ridge, New Jersey

In this paper there is presented the testimony of eye structure as found throughout all animate life, from three different viewpoints. First the facts are seen and inter-

preted by the evolutionist; tracing eye development from its most primitive form—a mere pigment spot, as in Euglena—up through various stages to the complete mammalian eye. Then there is taken up some of the abundant evidence revealed in various types of eye structures proving that no theory of mechanistic evolution can explain or account for conditions as they exist. It is impossible to construct a genealogical tree that will fit every form of eye known and at the same time account for other anatomical structures. Finally some of the marvelous adaptive design features of the human eye are analyzed which testify to every detail being carefully worked out by a Master Designer able to bring them about in His own chosen way. The paper will be illustrated with about 30 original photomicrographic lantern slides (3¼x4) to help make the arguments presented conclusive.

SPIRITUAL TRUTHS IN MATHEMATICS

Angeline J. Brandt, Ph.D.
Professor of Mathematics
Wheaton College

Some analogies between mathematical facts and spiritual truths are made. These arise in, various branches of mathematics and are made with the college student in mind. Postulational thinking, the concept of infinity, the functional concept, the idea of signed numbers, translation in analytic geometry, and the idea of variables and constants are used as illustrations to show how this is accomplished. For example, the concept of infinity is linked with that of eternity, and likewise the other topics have their spiritual analogs.

BEHAVIORISM AND PHILOSOPHICAL PSYCHOLOGY

Bernard Ramm, B.D., M.A.
Professor of Apologetics
The Bible Institute of Los Angeles

The doctrine of the soul is one of the paramount tenets of evangelical Christianity and is denied categorically by behaviorism. The seriousness of this denial is that it involves the very possibility of any type of spiritual activity on the part of man.

One of the factors making this denial possible and potent is that psychology and philosophy have gone their own ways in the past two decades at least, and it is the job of the philosophical psychologist to bring the two disciplines together. It is one of the purposes of a Christian philosopher of psychology to show on empirical grounds the need for a doctrine of the soul.

Behaviorism lamentably neglects this ground of philosophical psychology without which it cannot fully grasp the most general truths of psychology. Philosophical psychology, in turn, can point out to the behaviorists just where he sins against wider knowledge. The behaviorist adopts evolution as metaphysically ultimate; he denies consciousness; he tries to imitate physics; and he denies any validity to introspection—all of which seriously vitiates all his labors and casts suspicion on the validity of all his conclusions.

BASIC ANXIETY

Philip B. Marquart, M.D.
Psychiatrist
Wheaton College
Wheaton, Illinois

When Adam fell, his sin was disobedience. It resulted in guilt and a most terrible state of fear which we would call panic. Following this, there remained as a permanent part of human nature a certain restless uneasiness and dissatisfaction which has wrongly been called Basic Anxiety

by the secular men. It is rather the basis of the other genuine anxieties which we call Manifest Anxiety. Secular psychologists have pondered, vainly seeking the origin of Basic Anxiety, but we find it in the third chapter of Genesis. We find there also the seven basic fears or manifest anxieties which have haunted man ever since. By thus losing fellowship with God and the joy and satisfaction therein, man developed the two basic impulses: ego recognition and ego satisfaction. These two basic impulses can be analyzed into their various drives, urges or motives. These are really the "like passions" of the flesh and they may be classified into lusts of the flesh, lust of the eyes, and the pride of life. These constitute the Adamic motivation after the Fall. Prior to the Fall, the motivation was "at the impulse of thy love."

Basic Anxiety is best described in Isa. 57:20. It lasts all of our Christian lives, but it ends with the Resurrection. Ps. 17:15.

THE FALL AND ITS RELATION TO PRESENT CONDITIONS IN NATURE

Brian P. Sutherland, Ph.D.

Senior Research Engineer
Consolidated Mining and Smelting Co.
Trail, British Columbia

While there is much evidence in nature that can be used to show the handiwork of a beneficent Creator, there is also, beside the sinfulness of man, much of apparent natural evil seen in widespread waste, futility and pain. It seems desirable to try to determine why this is so, if the argument from design is to be used effectively.

Several theories that have been put forward are considered in the light of present day conditions, the record of the fossils and the statements of the Bible, particularly those concerning the Fall of man and its consequences. Suggestions are made as to a possible explanation of the evil in nature with a view to further consideration and discussion by the group.

Accommodations:

Rooms will be supplied by the Bible Institute of Los Angeles at a charge of not over \$1.50 per person per day including linen. These rooms will be in the Acacia Hotel across the street from the Institute, which is being used as a dormitory, or in the main building.

In case these facilities are insufficient to meet the need, the Willard Hotel adjoining the Bible Institute building may be used. Single and double rooms with bath are \$2.00 and \$2.50, respectively.

Meals:

No provisions are being made for supplying those attending the convention with dining room service. There are several restaurants nearby where good food may be obtained at reasonable prices.

It is suggested that the group eat the noon meal together at Clifton's Cafeteria, two and one-half blocks from Biola. Excellent food, reasonable prices, pleasant surroundings, and Christian management may be found there.

Fees:

A registration fee of \$1.00 will be requested in order that the normal work of the ASA will not be handicapped due to convention expenses.

Participation in field trips is optional and the costs for each are listed elsewhere.

Members of the Executive Council

- F. Alton Everest, E. E. (1951)*, President
Associate Director
Moody Institute of Science
Los Angeles, California
- Allan A. MacRae, Ph.D. (1950), Vice-President
President and Professor of Old Testament
Faith Theological Seminary
Wilmington, Delaware
- Russell L. Mixer, Ph.D. (1949), Secretary-Treasurer
Chairman, Division of Science and Professor of Zoology
Wheaton College
Wheaton, Illinois
- Roger J. Voskuyl, Ph.D. (1952)
Dean, Wheaton College
Wheaton, Illinois
- J. Laurence Kulp, Ph.D. (1953)
Lecturer in Geology
Columbia University
New York, N. Y.

*Year of retirement from Council

Past Council Members

- Edwin Y. Monsma, Ph.D. (1948)
Professor of Organic Science
Calvin College
Grand Rapids, Michigan
- Marion D. Barnes, Ph.D. (1947)
Research Chemist
Lion Oil Company
El Dorado, Arkansas
- Peter W. Stoner, M.S. (1945)
Chairman Dept. Mathematics, Engineering, Astronomy
Pasadena City College
Pasadena, California
- Russell D. Sturgis, Ph.D. (1944)
Head, Department of Chemistry
Ursinus College
Collegeville, Pennsylvania
- Irving A. Cowperthwaite, Ph.D. (1943)
Plant Engineer
Thompson Wire Company
Milton, Massachusetts
- John P. Van Haitsma, Ph.D. (1942)
Professor of Organic Science
Calvin College
Grand Rapids, Michigan

The Objects of the American Scientific Affiliation are:

- "(1) To integrate and organize the efforts of many individuals desiring to correlate the facts of science and the Holy Scriptures.
(2) To promote and encourage the study of the relationship between the facts of science and the Holy Scriptures.
(3) To promote the dissemination of the results of such studies." —Article I of ASA Constitution
- Each candidate for membership in the ASA must sign the following statement:

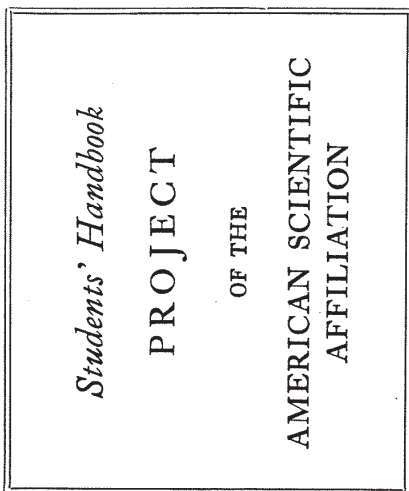
"I believe the whole Bible as originally given to be the inspired work of God, the only unerring guide of faith and conduct. Since God is the Author of this Book, as well as the Creator and Sustainer of the physical world about us, I cannot conceive of discrepancies between statements in the Bible and the real facts of science. Accordingly, trusting in the Lord Jesus Christ, The Son of God, my Saviour, for strength, I pledge myself as a member of this organization to the furtherance of its task.

Signed _____
—Article II of ASA Constitution

**SUBJECT CATEGORIES OF
LOCAL SECTION MEETINGS
1946–1984**

Subject	1946– 1949	1950– 1954	1975– 1979	1950– 1954	1975– 1979	1950– 1954	1975– 1979	1950– 1954
Anthropology	2	4	2	1	2	1	6	3
Apologetics	3	1	—	1	1	2	—	—
Archeology	6	—	2	—	—	—	—	1
Astronomy	1	—	2	—	—	—	—	5
Biology	3	13	12	6	2	—	3	5
Chem/Biochem	1	—	1	3	2	3	3	5
Cosmology/Cosmogony	—	2	5	1	2	—	1	3
Creation/Evolution	8	7	4	3	3	5	8	20
Devotional	3	4	1	—	2	2	4	3
Education	2	4	4	4	3	2	1	10
Environment	—	3	1	1	4	9	37	12
Ethics	—	—	1	1	—	1	3	1
Exegesis	5	12	3	—	5	1	9	8
Geology	3	8	4	6	—	15	—	3
Linguistics	—	—	—	—	—	—	—	—
Mathematics	3	1	3	—	—	1	1	1
Medicine	6	—	4	—	1	1	3	4
Missions	2	1	1	—	3	1	2	—
ASA Affairs	1	3	2	2	7	1	3	5
Origins	—	3	3	1	1	2	1	3
Paleontology	2	4	2	2	—	2	3	2
Philosophy	—	2	6	2	5	6	3	13
Physics	2	3	5	1	1	1	2	7
Science	4	5	2	6	5	5	13	9
Social Sciences	2	15	20	26	26	15	40	65
Theology	1	—	5	1	4	9	7	7
Arts	—	—	—	—	—	—	—	2
Totals	60	95	95	68	79	85	153	197

(Data for 1957 unavailable)



An Outline

OF THE AIMS AND PURPOSES OF
THE CHRISTIAN STUDENTS'
SCIENCE HANDBOOK



BEING PREPARED BY THE
AMERICAN SCIENTIFIC AFFILIATION

THE American Scientific Affiliation, a group of Christian Men of Science, has undertaken the task of compiling for university students a handbook designed to bridge the gap between the Bible and the world of science unfolded before them in the classroom. There is no denying that many discoveries and theories of modern science have philosophical implications, that apparent discrepancies arise between the Holy Scriptures and science. The issue is frequently clouded by misunderstandings and misinformation on the part of both believers and scientists. Sometimes a lack of understanding of the rightful use of theories in scientific work proves a stumbling stone to some believers.

[3]

Many of these students come from Christian homes. For the first time they are "on their own" among new surroundings, new friends, new ideas; truly a crucial period. Perhaps the only reference to the Bible and the Christian faith they hear is one of criticism, questioning, or derision. They are not prepared nor even forewarned and all too often the cost of the encounter is the faith of the student and his belief in the Bible as the Word of God.

Who is better prepared to step into this task of helping these bewildered students than Christian men, trained in science, most of whom are university professors? The American Scientific Affiliation is well aware of the magnitude of the job before them and it is only with assurance of resources far above their own that the work was started.

As a group of Christian men of science, we have yet to find disagreement between the established facts of science and the Holy Scriptures. In fact, we are often delighted at the beautiful corroboration of the accuracy and historicity of the Bible by new scientific findings. We frequently do see, however, much lack of harmony between God's Word and some unproven theories

[4]

of science. We realize that theories are vital to the growth of scientific knowledge, both for indicating possible fruitful avenues of investigation and as teaching aids. Our minds are so constituted that a "working hypothesis" is very valuable both in research and learning. Trouble arises for university students only when theories are not recognized or identified or when facts are incorrectly interpreted. Inasmuch as these theories are man-made, it is natural that exaltation of man and the resulting materialistic explanations of observed phenomena result. The American Scientific Affiliation, although agreeing on the great value of theories to science, would suggest the desirability of plainly labelling them.

The Christian Students' SCIENCE HANDBOOK proposes to inform and forewarn students of the difficulties they will likely encounter in the following courses and scientific fields:

1. Mathematics
2. Astronomy
3. Physics
4. Chemistry
5. Biology
6. Sociology
7. Geology
8. Archeology
9. Anthropology
10. Psychology
11. Philosophy

[5]

The first six follow the classical divisions suggested by Compte (1798-1857). The others are added on account of their more recent growth and/or their alleged source of difficulty to students. This list will quite likely be revised before the Handbook reaches its final form. It is proposed to cover each of these fields in a separate section of the Handbook by a concise consideration of —

1. The points in this field likely to raise difficulties in the student's mind;
2. The *teachings of modern science* and the *known facts* concerning these apparent difficulties;
3. The *Biblical position* on these apparent difficulties; and
4. A bibliography leading the student into a more comprehensive study of the Bible and scientific works than can be considered in the Handbook.

It is felt that such a frank airing of both sides of the question will appeal to the student mind and will receive a consideration when other more sensational approaches will not. Students are intelligent and fully capable of arriving at constructive conclusions if full data are presented. The dangerous, insidious conviction is

[6]

that based on an incomplete knowledge of the problem.

The statements and representations of the SCIENCE HANDBOOK must be accurate in every detail. They must be able to meet the scrutiny of men unfriendly to the cause of Christ and rise unscathed. Error or misrepresentations of science would seriously impair the usefulness of the book. For this reason, the editing of such a Handbook will be a painstaking task, and one which will demand and obtain the contributions of many specialists.

You can help this Christian Students' SCIENCE HANDBOOK, if you are a student or a worker with students, by suggesting specific things in the different scientific fields which have been sources of difficulty. If you are trained in some phase of scientific work you are invited to participate in one of the eleven divisions mentioned previously, either as a member of the American Scientific Affiliation or a cooperator. Suggestions from you will make the Handbook more valuable.

Address communications to:

DR. IRVING A. COWPERTHWAIT, *Secretary*,
THE AMERICAN SCIENTIFIC AFFILIATION
10 Willoughby Road
Milton, Massachusetts

[7]

Evolution and Christian Thought Today

CONTENTS

<i>Editor's Preface</i>	5
<i>List of Illustrations</i>	10
1 THE INFLUENCE OF DARWIN ON BIOLOGY by Thomas D. S. Key	11
2 THE ORIGIN OF THE UNIVERSE by George K. Schweitzer	33
3 THE ORIGIN OF LIFE by Walter R. Hearn and Richard A. Hendry	53
4 GENETICS by Donald S. Robertson and John C. Sinclair	71
5 THE ROLE OF HYBRIDIZATION IN EVOLUTION by Irving W. Knobloch	92
6 SYSTEMATICS AND SPECIATION by Wilbur L. Bullock	107
7 THE DISTRIBUTION OF ANIMALS by V. Elving Anderson	123
8 FOSSILS AND THEIR OCCURRENCE by Cordelia Erdman Barber	136
9 SIMILARITIES — THE IMPORTANCE OF THE OBVIOUS by J. Frank Cassel	154
10 A CREATIONIST INTERPRETATION OF PREHISTORIC MAN by James O. Buswell, III	165
11 THEOLOGY AND EVOLUTION by Carl F. H. Henry	190
<i>Index</i>	222
<i>List of Contributors</i>	223

SUBJECT CATEGORIES OF ASA JOURNAL PAPERS 1949–1983

Subject	Journal Volumes						
	1–5	6–10	11–15	16–20	21–25	26–30	31–35
Anthropology	2	11	2	8	16	8	9
Apologetics	1	9	—	2	—	2	1
Archeology	3	8	4	3	—	—	—
Astronomy	2	—	1	3	2	—	2
Biology	6	12	12	5	2	3	4
Chem/Biochem	—	5	2	—	—	11	1
Cosmology/Cosmogony	1	3	—	2	11	1	1
Creation/Evolution	7	12	17	8	36*	21	22
Devotional	—	1	8	9	8	19	9
Education	3	2	5	3	8	—	6
Environment	—	1	—	—	9	4	22
Ethics	—	—	6	1	—	5	3
Exegesis/Biblical	11	11	8	3	8	9	11
Geology	4	2	1	—	—	—	—
Linguistics	—	1	—	1	—	—	—
Mathematics	3	3	—	3	3	2	2
Medicine	—	—	2	2	—	2	3
ASA Affairs	2	7	6	6	3	1	19
Origins	1	1	2	—	—	—	—
Paleontology	4	1	3	—	2	—	—
Philosophy	5	13	7	11	3	6	11
Physics	7	1	2	1	—	4	4
Science	4	14	16	12	4	28	27
Social Sciences	13	41	51	30	72	91	77
Theology	3	8	4	4	5	1	6
Totals	82	167	159	117	192	219	241
Book Reviews	12	40	62	49	147	183	245

(* Bible-Science Symposium in Vol. 21)

TRIMMING DARWIN'S BEARD

The Evolution of a Policy on Textbooks

ROBERT B. FISCHER

The continuing debate on how California public school students should be taught about the origins of man has frequently degenerated into hardline statements of the "science or religion, take your pick" variety.

But that is not the choice—it is neither that simple, nor that complex.

The California State Board of Education has concluded its consideration of how the subject of origins should be treated in science textbooks and has approved editorial revisions which label evolution as theory instead of proved fact.

Even though the immediate issue in California has been resolved, for now at least, the broader issues remain, and can be expected to persist here and in other states.

★

Much of the public discussion and many of the statements issued by scientists, educators and other interested persons and groups can be summarized generally under two earlier proposed solutions to the problem:

1—Leave the books alone, as originally submitted by the authors and publishers, with discussions of evolutionary origins of the universe, of life and of man.

2—Insert discussions of creation, along with evolution, as alternative scientific explanations of origins.

These two proposals have typically been viewed by the public and by many participants in the debate as representing conflicts between science and the Bible, or between science and religion—or some forms of religion.

This particular distinction is inaccurate. The two proposals are not even solutions to the same problem, and thus cannot meaningfully be considered to be alternatives to each other. This situation appears to be in part another case in which well-meaning people have fallen into an old fallacy which may be expressed as, "Never mind the question, here's the answer"—then criticizing and ridiculing one another because their solutions differ.

Proposal 1, to leave books alone, is intended to solve the problem of preserving the scientific integrity of science and of science education. It

The writer is dean of the School of Natural Sciences and Mathematics at California State College, Dominguez Hills, and was one of two scientists who served as advisers to the state Board of Education on editing of science textbooks on the topic of origins.

assumes, in effect, that the only problem, if indeed any real problem exists, is a problem for others and not for science. But there are problems in this area for science. There are long-standing inadequacies in the teaching of the nature of science which are perpetuated in these books and these problems are brought into focus in dealing with topics of origins.

First, very little attention is paid to the limits and presuppositions of science, either in general discussions or in dealing with specific topics. This neglect results, for example, in a confusion of scientific evidence with scientific interpretation. It results in a lack of recognition of the proper role of speculation in scientific work. Science is permitted to come through to students (and at times to scientists, as well) with a much greater degree of certainty and finality than is warranted.

Second, there is a frequent blurring of the distinctions between science and scientists and of the inevitable relationships between the two. Science involves knowledge and methods for the acquisition of knowledge. Science deals with the realm of matter and energy, for this is the arena in which the hypotheses and theories of science must be tested.

★

But scientists are not necessarily limited thus. Scientists are people, not unlike other human beings. One consequence of the blurring of this distinction is a confusing of "science" with "what scientists think" or even with "what scientists believe."

Another consequence has been an almost total absence in science textbooks of any recognition of any rightful relationships of science to other disciplines and to the totality of man as an intellectual and emotional and spiritual being. The few statements found in this area gen-

erally tend to be disparaging of the other disciplines.

And now we come to what may be the crux of this situation with regard to Proposal 1. Because of both of these long-standing inadequacies in the teaching of science, there is a strong tendency to extrapolate from science to scientism—that is, from science to the philosophical view that there can be no knowledge apart from scientific knowledge.

Scientism is the world-view that all of life and all of reality are totally naturalistic and nontheistic. Yet science is not scientism, and scientism is not science, and the scientific integrity of science books and of science education is weakened by permitting the two to be confused with each other.

★

Proposal 2, to insert creation as a scientific alternative to evolution, is intended to solve some of the problems which Proposal 1 neglects, especially in the areas of unwarranted dogmatism in scientific explanation and in distinguishing science from scientism. Proposal 2 assumes, in effect, that to insert creation would not detract from the scientific integrity of the books. But the terms creation and evolution are not scientific alternatives, although theistic creation and nontheistic scientism indeed are mutually exclusive theological and philosophical alternatives.

There is even some ambivalence in the use of the terms creation and evolution. The concepts of evolution are properly considered within science, insofar as the term refers to natural substances and processes and insofar as it recognizes relevant scientific limits and presuppositions. However, insofar as the term evolution refers to extrapolations into scientism, and this not infrequently is the case, evolution no longer is science and should not be presented as such.

The term creation has some implications for natural substances and processes so, in this limited sense, is appropriate in science. In a much more complete sense and in much more frequent usage, however, the term creation signifies a Creator, a Supreme Being who is not ultimately limited to natural cause and effect relationships. In this sense, concepts of creation are more

properly considered as theology and philosophy, and not as science.

In retrospect, it appears that the issue which really underlies the public conflict over these books is the conflict between two basic ways of looking at all of life and reality: (1), a purely naturalistic world-view and (2), a theistic world-view. This basic issue is surely not a problem for science education as such, even though it is one of considerable concern to human beings, including those who are scientists and students of science.

Over the years, various specific conflicts have arisen by superimposing this basic issue upon other issues which do not coincide. The present situation appears to be such a case.

One result of this superimposing of a basic issue (purely naturalistic vs. theistic world-views) upon a specific issue (theories of origins in science books) when the two issues do not fully or clearly coincide, has been a polarization of people that has stood in the way of full, valid understandings, both of the nature and content of science, and of the overall world-views and commitments of persons.

If this assessment of the recent California science book controversy is even approximately valid, it would be a false solution to follow Proposal 1 and to permit science education, even inadvertently or unintentionally, to imply that science is equivalent to a purely naturalistic world-view. It would be an equally false solution to follow Proposal 2 and to present two or more alternative world-views under the guise that both are science per se.

★

The solution which the California State Board of Education did adopt recently was neither Proposal 1 nor Proposal 2. Rather the board called for and adopted an editing of the books to remove unwarranted dogmatism and to emphasize "how" and not "ultimate cause," in topics dealing with origins.

This solution to the immediate problem bears some of the characteristics of being a "band-aid approach" to some basic issues. I believe, however, that it is one positive step toward a more meaningful understanding of the nature of science and of man because it is based upon a more complete identification of what the problems are.